

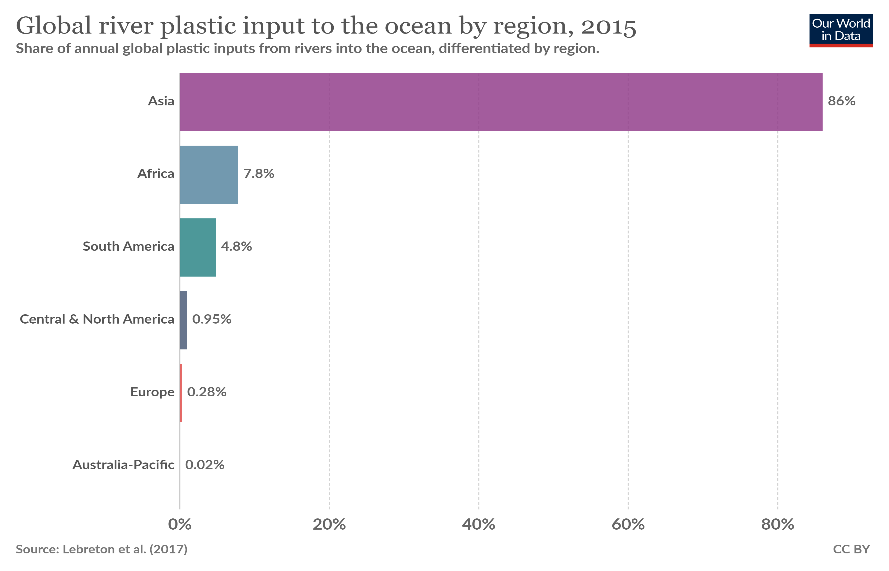


**教室で作るエコバッグが作りだす新たな虹の架け橋。**

**世界の同世代たちとSave-Earth Movement**

【PROJECT GOAL　（プロジェクトの目的】

Our World in Data（資料１）からわかるように、プラスチックによる海洋汚染はアジア国を中心に深刻な状況を引き起こしている。 その当事国である次世代の生徒たちがSDGsを元に真剣に考えて、「実際に地球を守るための行動を起こせる」きっかけ作りを目的としている。 日本の学校教育では様々な国際問題についての現状を学ぶことがあっても、他国の生徒と一緒になって学び、それに対する行動を実際に起こすような教育活動はできていない。今もなお世界中に蔓延する新型コロナウィルスより各国の学校は閉鎖していても、生徒たちが、または学校同士が繋がるきっかけさえあれば、生徒達は必ず新たな気づきと行動を生むことはできると思い、今回のプロジェクトを開始した。



（資料１）

【PROJECT FLOW （プロジェクトの流れ）】

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 英語科（コミュニケーション英語） | 進捗 | 社会科（現代社会） | 進捗 | 家庭科（家庭基礎） | 進捗 |
| 1１月  ２週目 | ８クラスのそれぞれの相手国決定 | 完了 |  |  |  |  |
| １１月  ４週目 | 相手国の自己紹介と生徒写真完成 | 完了 |  |  |  |  |
| 12月１週目 | 英語科でSDGs No.12-13に沿ったテーマに沿った英文を読む  Plastic waste problem | 完了 | 現代社会でSDGsに対する理解並びに特にNo.12-13を重点的に学ぶ | 完了 | 家庭科の授業内で、2人1組となり1つのエコバッグを作成開始。合計で20個×８クラス | 完了 |
| 12月２週目 | 中心にプレゼンを作成、録画し、Flipgridに投稿。 | 完了 |  |  | エコバッグ作成中の動画は随時Flipgridでアップし、相手国の生徒に見てもらう。 | 完了 |
| １２月  ３週目 | 相手国とのリモート授業の中で代表生徒たちによるプレゼン、意見交換 | 完了 |  |  | パッグ完成後にメッセージを添えて、発送を行う。 | 完了 |
| １月  ３週目 | 各国からの感謝ビデオやプロジェクト参加を通しての気づきや自分たちが起こした行動レポートが到着（１月中旬）予定 | | | | |  |

【PROJECT PARTNERS　（共同プロジェクト相手）】

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1組 | 2組 | 3組 | 4組 | 5組 | 6組 | 7組 | 8組 |
| 相手国 | インドネシア | パキスタン | フィリピン | マレーシア | 台湾 | ミャンマー | クロアチア | インド |
| 学校名 | SMAN 1 Jepara | Practical Schooling System Cambridge O Level Branch | GENERAL SANTOS CITY SPED INTEGRATED SCHOOL | SERI BINTANG UTARA HIGH SCHOOL | Taipei Wanfu Municipal Elementary school | BEMS - Gaygue | Bernardin Frankopana Grammar and Vocational School | Ramagya School Dadri |
| 住所 | SMAN 1 Jepara  Jl. C.S. Tubun 1, Jepara, Central Java, Indonesia, 59419 | D-8 Block 13 D. Gulshan i iqbal. Karachi. Pakistan | Quezon Avenue, Dadiangas West, General Santos City, South Cotabato, General Santos City, 9500 South Cotabato | 91, Jalan 3/91A, Taman Shamelin Perkasa, 56100 Cheras, Wilayah Persekutuan Kuala Lumpur, | No.30, Lane 170, Sec.5, Roothvelet Rd, Distr. Wenshan Taipei, Taiwan. R.O.C  Zip code: 116 | Dr. Thiri Wai  No-372, Thunandar 8th Street, North Okkalapa, Yangon, Myanmar. | Gimnazija i strukovna škola Bernardina Frankopana  STRUGA 3  47300 OGULIN  CROATIA | Ramagya School Dadri  Bishara Road Uttar Pradesh  India  203207 |
| 担当教員  （海外） | Ninok Eyiz Sumianingrum | Unzaila Daniyal | IRENE V. PELLER | Dr. Lee Saw Im | Ming-Yao Hsiung | Dr. Thirii Wai | Marijana Smolčec | Taruna Kapoor  Principal |
| 担当教員  （本校） | 中島T | 深見T | 荒木T | 入谷T | 荒木T | 入谷T | 深見T | 中島T |
|  | 1組 | 2組 | 3組 | 4組 | 5組 | 6組 | 7組 | 8組 |
| 相手国 | インドネシア | パキスタン | フィリピン | マレーシア | 台湾 | ミャンマー | クロアチア | インド |
| 学校名 | SMAN 1 Jepara | Practical Schooling System Cambridge O Level Branch | GENERAL SANTOS CITY SPED INTEGRATED SCHOOL | SERI BINTANG UTARA HIGH SCHOOL | Taipei Wanfu Municipal Elementary school | BEMS - Gaygue | Bernardin Frankopana Grammar and Vocational School | Ramagya School Dadri |
| Flipgrid  QR  Username  は **s1** |  |  |  |  |  |  |  |  |

QRコードをスキャンする際は隣のQRが入らないように折るなりしてスキャンすること。

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|  | **TASK**  **課　題** | **Goal**  **目　標** | **SUBMISSION**  **提　出　先** | **EVALUATION**  **評　価　点** |
| 1 | 家庭科のペアになっている組で４人グループを作るPlastic Pollution についての４つのArticleをまずはジグソー法で理解後、Comprehension Quizを解決する。 | Plastic Pollution に対する知識を手に入れ、SDGs No. 14 “Life Below Sea”をテーマに各々の意見を作る。 |  |  |
| 2 | 相手国の生徒に対してペアで自己紹介並びにどんなエコバックを作成しているかを説明する動画（最低１分以上）を撮影する  （※BYOD又はiRoom）  ※iRoomを使用しないクラスは各自のデバイスでまずは動画のみを撮影し、自宅又はWifi環境の元でFlipgridに投稿する。 | 相手国の生徒に自分自身を伝えるのが目的。趣味など好きな事を伝えてOK。相手の自己紹介も何度も聞くこと。 | Flipgrid  エコバック作成相手への返信動画として | 3学学期  音読評価に入る  **５**／15点 |
| 3 | Plastic Crisis and Zero Wasteに対するショートプレゼンテーションを準備、練習、録画する。（プレゼンテーションはエコバックを作成しているペアで行う。） | プレゼンテーションの基礎を学び、実践。原則プレゼンテーションの内容は完全暗記で行う。カメラ目線であること。 | Flipgrid  エコバック作成相手への返信動画として  最終提出期限  **12月２３日（火）**  **21：00** |
| 4 | 相手国からのPlastic Pollutionに対するプレゼン、並びにEco-Bag到着後のThank-You Videoもアップされる。どんな笑顔が見れるかな🌟楽しみだね。 |  | | |

**〔PROJECT達成に向けてのあなたの計画を書きなさい〕**

〔Resource 1〕

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| How much plastic enters the world’s oceans?  タイムライン  自動的に生成された説明  To understand the importance of plastics' input to the natural environment and the world's oceans, we must understand various plastic production, delivery, and waste management chain details. This is important in understanding the scale of the problem and achieving the most effective interventions for reduction.  The global main production of plastic was 270 million tons.  global plastic waste was 275 million tons – it did exceed annual main production through wastage of plastic from past years.  plastic waste produced in coastal areas is most at risk of entering the oceans; in 2010, seaside plastic waste – generated within 50 kilometers of the coastline – amounted to 99.5 million tons.  only plastic waste which is improperly managed (mismanaged) is at significant risk of leakage to the environment; in 2010, this amounted to 31.9 million tons.  of this, 8 million tons – 3% of global annual plastics waste – entered the ocean (through various holes, including rivers).  Plastics in the oceans' surface waters are several orders of size lower than annual ocean plastic inputs. This difference is known as the 'missing plastic problem' and is discussed here.  The amount of plastic in surface waters is not very well-known estimates range from 10,000s to 100,000s tons.  .  How do we dispose of our plastic?  【**Plastic disposal methods**】  **グラフ  自動的に生成された説明**How has the global plastic waste disposal method changed over time? In the chart, we see the share of global plastic waste discarded, recycled or incinerated from 1980 through to 2015.  Before 1980, recycling and incineration of plastic were negligible; 100 percent was consequently discarded. From 1980 for incineration and 1990 for recycling, rates increased on average by about 0.7 percent per year.4  In 2015, an estimated 55 percent of global plastic waste was discarded, 25 percent was incinerated, and 20 percent recycled. | 〔Vocabulary〕  intervention  介入、干渉※  ※どんな意訳をしたらいいんだろうね？  exceed  超える、超過する  mismanage  管理を誤る  incinerate  焼却する  consequently  結果的に  discard  捨てる、処分する  negligible  少ない、ごく少量 |

〔Resource 2〕

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| Which sectors produce the most plastic?  **グラフ, じょうごグラフ  自動的に生成された説明【Plastic use by sector】**  To which industries and product use is the main plastic production allocated? In the chart, we see plastic production allocation by sector for 2015.  The packaging was the dominant use of main plastics, with 42 percent of plastics entering the use phase.  Building and construction was the second-largest sector using 19 percent of the total. Basic plastic production does not directly reflect plastic waste generation (as shown in the next section). This is also influenced by the polymer type and lifetime of the end product.  Main plastic production by polymer type can be found here.  グラフ, 棒グラフ  自動的に生成された説明Which countries produce the most plastic waste?  【**Plastic waste per persons**】  The chart shows the per person rate of plastic waste generation, measured in kilograms per person per day. Here we see differences of around an order of magnitude: daily per capita plastic waste across the highest countries – Kuwait, Guyana, Germany, Netherlands, Ireland, the United States – is more than ten times higher than across many countries such as India, Tanzania, Mozambique and Bangladesh.  These figures represent total plastic waste generation and do not account for differences in waste management, recycling or incineration. Therefore, they do not represent quantities of plastic at risk of loss to the ocean or other waterways.  グラフィカル ユーザー インターフェイス が含まれている画像  自動的に生成された説明【**Total plastic waste by country**】  In the chart we see the total plastic waste generation by country, measured in tons per year. This therefore takes account of per capita waste generation and population size. This estimate is available only for the year 2010.  With the largest population, China produced the largest quantity of plastic, at nearly 60 million tons. This was followed by the United States at 38 million, Germany at 14.5 million and Brazil at 12 million tons. | 〔Vocabulary〕  allocate  割り当てる  chart  表、グラフ  dominant  最も有力な  construction  建設  end product  最終製品  per person  一人当たり  Kuwait  クエート  Guyana  ガイアナ  Mozambique  モザンビーク  incineration  焼却  quantity  量、  waterway  水路  takes account of  考慮する  quantity  量 |

〔Resource 3〕

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| How does plastic impact wildlife and human health?  There have been many documented incidences of the impact of plastic on ecosystems and wildlife. Peer-reviewed publications on plastic impacts date back to the 1980s.　There are **three key** pathways by which plastic debris can affect wildlife:  【**ENTANGLEMENT**】  Entanglement – the entrapping, encircling or constricting of marine animals by plastic debris.  Entanglement cases have been reported for at least 344 species to date, including all marine turtle species, more than two-thirds of seal species, one-third of whale species, and one-quarter of seabirds.34 Entanglement by 89 species of fish and 92 species of invertebrates has also been recorded.  Entanglements most commonly involve plastic rope and netting35 and abandoned fishing gear.36 However, entanglement by other plastics such as packaging has also been recorded.  【**INGESTION**】  Ingestion of plastic can happen accidentally, deliberately, or indirectly through the ingestion of prey species containing plastic.  It has been documented for at least 233 marine species, including all marine turtle species, more than one-third of seal species, 59% of whale species, and 59% of seabirds.37 Ingestion by 92 species of fish and 6 species of worms has also been recorded.  The size of the organism ultimately limits the size of the ingested material. Tiny particles such as plastic fibers can be taken up by small organisms such as filter-feeding oysters or mussels; larger materials such as plastic films, cigarette packets, and food packaging have been found in large fish species; and in extreme cases, documented cases of whales have shown ingestion of huge materials including 9m of rope, 4.5m of hose, two flowerpots, and large amounts of plastic sheeting.  Ingestion of plastics can have multiple impacts on organism health. Large volumes of plastic can greatly reduce stomach capacity, leading to poor appetite and a false sense of satiation. Plastic can also obstruct or perforate the gut, cause ulcerative lesions of gastric rupture. This can eventually lead to death.  【INTERACTION】  Interaction – interaction includes collisions, obstructions, abrasions or use as a substrate.  There are multiple scenarios where this can have an impact on organisms. For example, fishing gear has been shown to cause abrasion and damage to coral reef ecosystems upon collision. | 〔Vocabulary〕  Entanglement  もつれ  ingestion  (食物などの)摂取.  fiber  繊維  documented case  確認された事例  multiple  多数の  eventually  将来的に  ulcerative lesion  潰瘍性病変  gastric rupture  胃破裂  interaction  相互の影響 |

〔Resource 4〕

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| *If we get this right – if we win the battle against plastic pollution – it will not only be a tangible victory for people and planet, but a clear example of how the United Nations is relevant to the lives of citizens around the world.*  *MARÍA FERNANDA ESPINOSA GARCÉS*, PRESIDENT OF THE GENERAL ASSEMBLY  Decades of overuse and a surge in short-lived, single-use plastics, has led to a global, environmental catastrophe. Up to 12 million tons of plastics are being swept into the oceans annually and gyres, or so-called ‘islands of plastic’, are blossoming. While most plastics are expected to remain intact for decades or centuries after use, those that do erode end up as micro-plastics, consumed by fish and other marine wildlife, quickly making their way into the global food chain. Indeed, micro-plastics have been found everywhere from the Artic to the Swiss mountains, in tap water and in human feces.  It has become abundantly clear that the issue of single-use plastics has led to a global crisis, the scope and scale of which is only now becoming evident. For this reason, the President of the UN General Assembly has included the issue of plastic pollution as a priority during the 73rd Session. Working together with Member States, UN agencies, civil society groups, and the private sector, President Espinosa intends to support efforts that help reduce plastic consumption, raise awareness, and support efforts to find global, regional and local solutions.  **13,000,000**  tons of plastic leak into the ocean each year  **17,000,000**  barrels of oil used for plastic production each year.  **500,000,000,000**  plastic bags used each year.  **83%**  of tap water found to contain plastic particles  **100,000**  marine animals killed by plastics each year.  **1,000,000**  plastic bottles bought every minute.  What We Need to Do  To beat plastic pollution, we need to entirely rethink our approach to designing, producing and using plastic products. We need solutions that lead to sustainable behavior change. Two elements are key to this: (1) global awareness and advocacy; and (2) strong policies and leadership.  The President of the General Assembly’s campaign against plastic pollution will seek to enhance awareness to the challenges and opportunities; advocate for consumer action; and urge leadership from world leaders. Key activities include:  ‘PLAY IT OUT: A festival against plastic pollution’  ‘PLANET OR PLASTIC: A photo exhibit at the United Nations’  ‘ | 〔Vocabulary〕  GENERAL ASSEMBLY  国連総会  short-lived  一時的な  single-use  使い捨ての  catastrophe  大惨事  gyres  旋流; 環流  abundantly  豊富に、十分に  scope  範囲  scale  規模、物差し  priority |

Lesson X Plastic Pollution

Comprehension Quiz

Q. What happens to plastic waste?

1. It never fully goes away; it just breaks into little pieces.
2. It is a biodegradable material, so it eventually disintegrates.
3. There is no such thing as plastic waste, all plastic is recycled.
4. It is dumped in the ocean for fish to eat.

Q. Why is plastic dangerous for marine life?

1. They mistake it for food and cannot digest it.
2. They can get tangled in it which hinders their ability to swim.
3. Both ➀ and ②
4. It's not dangerous because they use plastic waste for habitats.

Q. Where does the majority of plastic waste end up?

1. Burned for energy.
2. Oceans
3. Landfills
4. Recycled

Q. How many million tons of plastic are dumped in our oceans?

1. 1 million tons
2. 8 million tons
3. 20 million tons
4. 50 million tons

Q. How many marine species are harmed by plastic pollution?

1. 52
2. 693
3. 1,326
4. 5,489

Q. What percent of its plastic does the US recycle?

1. 9%
2. 50%
3. 35%
4. 75%

Q. By what year do scientists predict plastic will outweigh fish in the ocean, pound for pound?

1. 2020
2. 2050
3. 2250
4. 3000

Q. Which of the following answers contains the top 5 contributing countries to the world’s plastic pollution problem?

1. Russia, France, USA, Vietnam, India
2. Indonesia, Thailand, USA, China, France
3. Thailand, China, Indonesia, Vietnam, Philippines
4. USA, China, India, UK, Australia

Q. What Can You Do to End Plastic Pollution? Make your presentation script.

Presentation Support Sheet

プレゼンテーションとは，聴衆の前に立ち，物事を紹介したり，意見を述べたりする活動である。効果的なプレゼンテーションをするには事前に十分準備をし，練習をしておく必要がある。また，グラフや図，実物などを提示することで説得力が増す。

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| --- | --- | --- |
| 1 | Brainstorming | プレゼンのテーマを決めるために、関連事項に対する思いつく事を自由に書く。 |
| 2 | Researching | インターネットを用いて、必要な資料を探す。視聴を引用する場合は必ず出典を明記する。 |
| 3 | Outline  図を用いて考えたことを論じる順番に整理し，原稿の下地となるアウトラインを作成する。まずは日本語で考え，その後で英語に置き換えてもよい | **テーマ：プラスチック海洋汚染**  （例）今世界でどんなことが起こっているのか  具体的な事例や詳細  （例）海洋プラスチックと生き物の関係  具体的な事例や詳細  （例）問題解決するためにはどうすれば？  具体的な事例や詳細 |
| 4 | Write a script  〔原稿を書く〕 | タイトル： **Plastic Pollution**  **序 論 　概要・問題提起**  Hello, everyone.　My name is ..... and ....  **Today I’d like to talk to you about** plastic pollution in our ocean. In the world today, plastic pollution is one of the biggest environmental crisis, which mean we need to take an action urgently for this.  　　 聴衆への呼びかけ  　　 トピックを示す    聴衆の注意を引く  **To start with**, there is more plastic garbage than  plastic product. This is extremely negative because it means the world is polluted by plastic garbage. Some of this plastic garbage will end up in the ocean and that will be bad for the animals and for us because the creatures in the ocean might eat the plastic by accident. Then, human possibly will eat the fish or other creatures that had eaten the small plastic, which called “nano plastic.” Moreover, they might be injured by the plastic garbage. It will damage the eco-system.  To fix this problem, we will need to clean up all plastic garbage and recycle plastic products. Plus, more important thing is to tell the world how harmful impact on the earth this is.  **本 論 　具体的な内容**  　　 具体例を挙げながら  論点を述べる    原因や理由を述べる  解決策などを述べる  **結 論 　文章全体のまとめ**  **To summarize**, although it will take a long time to make the ocean back to the way it was, we can not ignore all kinds of problem in the world for the next generation.  All of us must think carefully about this matter for our future.  **Thank you very much for your attention.**  まとめ(要約)  結びの言葉    あいさつ |
| 5 | **Check a script**  **原稿の確認** | プレゼンテーションを行う前に，原稿について次の項目をチェックする。   |  |  |  | | --- | --- | --- | | 構成 | 序論 | □ 聴衆の関心を引く内容になっているか。  □ トピックが明確に提示されているか。 | | 本論 | □ 論点は明確か。  □ 理由や出来事が適切な順番で示されているか。 | | 結論 | □ 伝えたいことを簡潔にまとめているか。  □ 印象に残る結びの言葉か。 | | 文法 | 動詞 | □ 主語と動詞が呼応しているか。  □ 適切な時制が使われているか。 | | 名詞 | □ 単数・複数は正確か。  □ 冠詞は適切か。 | | 発音 |  | □ 読み方がわからない単語はないか。  □ アクセントがわからない単語はないか。 |   実際に読むときに，をおくところや強く読むところ(重要なところ)をマークしておく。それぞれスラッシュ( / )や下線などで示すとわかりやすい。  Second, / Japanese people have one of the longest average life spans in the world.  強く読む  間をおく |
| 6 | **Rehearsal** | 原稿の確認を終えたら，次はリハーサルを行う。実際に音読してみることで，文章の構成がわかりにくいところや発音しにくい語句などに気付く。必要に応じて原稿を修正する。また，プレゼンテーションの時間を計ってみる。制限時間がある場合は，その時間内に終わるよう原稿を調整する。ある程度原稿を覚えるくらい何度も練習をするとよい。アウトラインを見て発表できるように準備しておくと，原稿をそのまま読むよりも，聴衆に語りかけるように自然に話すことができる |
| 7 | **Recording** | プレゼンテーションでは発表の中身だけではなく，「伝え方」も大切である。特に，姿勢やアイコンタクト(相手の目を見ること)，発声の仕方は重要なポイントである。今回はオンライン用のプレゼンという事は、カメラ目線や上半身の動き（時に手の動きが重要になってくる）  **姿勢・アイコンタクト・ジェスチャー**  姿勢やアイコンタクトの良し悪しで，自分の言いたいことが相手に伝わるかどうかは大きく左右される。両足を肩幅程度に開いてまっすぐに立ち，しっかりと聴衆を見る。発表内容を強調したいときには，不自然にならない程度にジェスチャー(身ぶり手ぶり)を使う。 |