

第6学年 英語+ESDの合成学習指導案

屋久島教育委員会

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1 題材 「 My Favourite Animal and I (好きな動物と私たちの繋がり) 」

2 題材の目標

The purpose of this exercise is to employ the English phrases that students learn in their English textbook towards ESD in a standalone, three-hour workshop. Students will use art in conjunction with English phrases and vocabulary pertaining to animals and the food chain as a doorway into a Japanese-language based discussion on both plastic pollution and pollution-reduction strategies that catalyse sustainable transformations concerning everyday plastic usage.

3 題材について

(1) 教材観

- While the elementary school English textbook, “New Horizons”, provides some entry points for ESD topical discussion, these points are both optional in utilisation and negligible in import relative to the overall course of the textbook. In addition, they are often overlooked by teachers, particularly in lower-performing classes where priority is instead given to students’ basic comprehension of the unit’s English grammar points.
- Further, the English vocabulary and grammar taught in classrooms is often cloistered within those classrooms, with little interplay or application outside of English class. This is not only true for their practical employment outside of school, but also and especially so with regard to the students’ other studies.
- As such, this three-hour workshop utilises art and the existing curricula framework of the elementary school 6th grade English textbook “New Horizons” Unit 5, “We all live on the Earth” in order to catalyse connection between students’ English studies and ESD topics. This unit’s topical focus is the food chain, with key grammar points reflecting various animals’ primary diet and habitat.

(2) 児童観

- Upon completion of Unit 5 in their English textbook, 6th-grade students at this point have also learned about both microplastics and the food chain in their science class. This provides the theoretical foundation upon which to introduce these ideas in English, as well as allows this workshop to reinforce and review concepts students have touched upon in their other classes.
- By centring this exercise around the students' favourite animal and an artistic activity, we are ideally establishing an emotional connection upon which the discussion of plastic pollution is to be cantilevered. The crucial relationship between emotional attachment and sustainable transformation is long-established (Adams et al, 2010; Ingold, 2000; Norgaard, 2011; Orange, 2017), and the employment of this emotionality through art-based sustainability exercises has been shown to deepen understandings of nature (Raatikainen et al, 2020), support self-empowerment toward environmental action (Jokela, 2019), and prompt sustainability discourse (Mjaaland, 2009; Thomsen, 2015), among others. The topic at hand—plastic pollution—thus becomes more memorable and relevant to the students engaged in this exercise.
- The final step of co-teaching, where students present their artistic creations to one another, further solidifies their understanding of the topic *in English* by prompting verbal output of information learned throughout the course of the exercise.

(3) 指導観 (See attached 単元構造 for additional details)

みつめる

1. In step one of the みつめる stage, students fold a sheet of paper horizontally to create four equally-sized, vertically-distributed sections.
 - In the first section, students draw their favourite animal. They then label this drawing with the English phrase, “My favourite animal is the XYZ.” For example, “My favourite animal is the dolphin.”
 - These “favourite” animals may, at the instructor’s discretion, be limited to local animals, wild animals, or any other category as the instructor sees fit. In practical experience, not restricting the animal type opens up room for expanded discussion on plastic pollution and the influence of human activity on wildlife later on the exercise. However, restricting animal types to regional species, for example, localises the exercise to the students’

immediate environs and reinforces the place-based pedagogies of Japanese ESD programs. Further, including domestic pets as an option for students may draw forth interesting anecdotal stories from students of their pets picking up or eating litter, which expands the scope of the discussion on plastic pollution's environmental impact.

- In the second section, students draw the animal's primary food source. This may be another animal species, or a plant species, depending on the "favourite" animal in question. Students may use their tablets to search for this information on the internet. Students then label this section with the key phrase from the textbook, "XYZ eats ABC," with XYZ being their "favourite" animal, and ABC being the food source. For example, "Dolphins eat fish."
 - In the third section, students draw their favourite animal in its wild habitat. Students then label this section with the second key phrase from the textbook, "XYZ lives in the DEF," with XYZ being their "favourite animal" and DEF being the habitat name. For example, "Dolphins live in the sea."
2. In stage two, students are shown a video on the scale of plastic production throughout human history, which is available on YouTube. Here the instructor may prompt students to think about what the connection between this video and the drawing exercise might be, with the hopes that at least one student will draw upon their microplastic discussion from science class and realise that the next topic for discussion is plastic pollution and plastic entering the food chain.

調べる

1. In step one of the 調べる stage, students utilise their tablets to research whether plastic pollution has been found in the habitat of their favourite animal. They will first look up the geographical distribution of their favourite animal, and from there can find information on plastic pollution in those areas. If there is plastic pollution in those habitats, students then draw plastic pollution into their illustrations of their favourite animal's habitat.
2. In step two, students then research whether or not their favourite animal has been documented as either 1) consuming plastic trash, or 2) existing in a chain of microplastic (as often is the case with oceanic animals). Depending on the result of their research, students will once again utilise the key grammar from the textbook and

write, in the final and bottom-most section of their paper, either “XYZ eats plastic,” or “XYZ does not eat plastic.”

3. Finally, students present about their favourite animal to their classmates by reading aloud the sentences with which they labelled their illustrations. This serves as a knowledge-sharing exercise between students to learn about the animals that their classmates researched. It also serves as a reading and speaking exercise in English.

深める

1. This stage of the exercise consists of a round-table discussion (in Japanese) with students on how we can reduce the environmental impact of humans’ plastic usage so as to reduce its accidental and detrimental consumption by animals. At the instructor’s discretion, students may be divided into brainstorming groups, or the discussion may be undertaken together as a class.
 - Students, having studied about plastic pollution in their other classes such as science and social studies, will presumably bring forth ideas such as avoiding the purchase of products with plastic, using eco-bags at the grocery store, RRR, etc. This functions as a review of information students have previously learned.
 - For time’s sake, the instructor here may prepare prompts about topics that may lie beyond the scope of their students’ awareness, such as reducing plastic production on a corporate level, plastic alternatives such as bioplastics, and utilising their democratic power as citizens to vote in order to change public policy concerning the regulation of plastics.

広げる

1. In this final stage, students brainstorm together how to spread information about both their favourite animals being affected by plastic pollution as well as how to implement the plastic-avoidant strategies they came up with in the immediately precedent stage. As a standalone workshop, this concludes this exercise. At instructor’s discretion, however, actions may be taken to continue the exercise beyond the standalone three-hour workshop, such as presenting this information to other students in the school, having the students design a newsletter containing this information, or any other course of action that the students themselves may have brainstormed.

(4) ESDとの関連 (◎ 十分、○ 概ね、△ 不十分)

- 本学習で働かせるESDの視点 (見方・考え方)
 - ◎ 相合性 ... Connecting English with the global theme of climate change; understanding humans' impact on the environment and the flow of microplastics through the food chain.
 - ◎ 有限性 ... The wastefulness of plastic usage as well as plastic pollution is a central theme of this exercise, with RRR presumably comprising the bulk of students' brainstorming on sustainability transformation.
 - ◎ 責任性 ... The overarching thematic subject of this exercise: plastic pollution by humans negatively affects other species, as well as humans' problem-solving capabilities in the face of this problem.

- この学習を通して育てたいESDの資質・能力 (◎ 十分、○ 概ね、△ 不十分)
 - ◎ 批判的に考える力 ... Students think critically about plastic usage and consumption, and in their brainstorming should come up with ways to counter the mainstream availability and wasteful convenience of plastics.
 - ◎ 未来像を予測して計画を立てる力 ... Students' brainstorming of practical strategies to reduce plastic consumption necessarily envisions a world in which wildlife is not negatively affected by the material habits of humans.
 - ◎ コミュニケーションを行う力 ... The application of English throughout this exercise, in combination with the knowledge-sharing and roundtable-discussion activities, ensures that communication is a focal point of the workshop.
 - ◎ 繋がりを尊重する態度 ... The direct link between human actions and environmental detriment, as well as the scope of individual and societal behaviour in sustainable transformations, is a focal point of this exercise. However, in keeping with the 他者を協力する態度 indicator, this aspect

has much more room for exploration than currently covered by this exercise.

- この学習を通して育てたいESDの価値観（◎ 十分、○ 概ね、△ 不十分）
 - ◎ 自然環境、生態系の保全を重視する ... The primary theme of this exercise.

- 達成が期待されるSDGs
 - 1 2 作る責任、使う責任
 - 1 3 気候変動具体的な対策を
 - 1 4 海の豊かさを守ろう
 - 1 5 陸の豊かさを守ろう

4 参考文献

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