

様式 A-1
(FY2023)

令和6年 1 月 26 日

サイエンス・ダイアログ 実施報告書

1. 学校名・実施責任者氏名: 京都府立山城高等学校・遠藤 耕平
2. 講師氏名: Dr. Jordan Thomas CARLSON
3. 講義補助者氏名: 稲垣 俊助 氏
4. 実施日時: 2024 年 1 月 19 日 (土) 10 : 00 ~ 11 : 50
5. 参加生徒: 1 年生 40 人、 2 年生 10 人、 3 年生 10 人 (合計 60 人)
備考: (例: 理数科の生徒)
6. 講義題目: 日本の低炭素エネルギー転換実現に向けた国際サプライチェーンでのリスク評価分析
7. 講義概要: カナダと日本の比較について・化石燃料の問題点と再生可能エネルギーの利点について
8. 講義形式:
☒ 対面 ・ ☐ オンライン (どちらか選択ください。)
1) 講義時間 70 分 質疑応答時間 40 分
2) 講義方法 (例: プロジェクター使用による講義、実験・実習の有無など)
プロジェクター使用による講義
3) 事前学習
☒ 有 ・ ☐ 無 (どちらかに○をしてください。)
使用教材 サイエンスダイアログの HP からダウンロードした SampleC を講師に記入してもらい、その内容を基に本校で作成したプリントを使用
9. その他特筆すべき事項:

1 年生でも聞き取りやすく理解しやすい英語で講義してくださった。質疑応答も熱心に答えていただき感謝しています。

Form B-2
(FY2023)
Must be typed

Date (日付)
22/1/2024 (Date/Month/Year: 日/月/年)

Activity Report -Science Dialogue Program-
(サイエンス・ダイアログ事業 実施報告書)

- Fellow's name (講師氏名): Jordan Thomas Carlson (ID No.P22725)
- Name and title of the accompanying person (講義補助者の職・氏名)
Shunsuke Inagaki, Master's Student, Environmental Education Laboratory, Graduate School of
Global Environmental Studies, Kyoto University
- Participating school (学校名): Yamashiro High School
- Date (実施日時): 20/1/2024 (Date/Month/Year: 日/月/年)
- Lecture title (講義題目):
Sustainable energy and energy transitions (持続可能なエネルギーとエネルギーの移行)
- Lecture format (講義形式):
◆ ☒ Onsite ・ ☐ Online (Please choose one.)(対面 ・ オンライン)((どちらか選択ください。))
◆ Lecture time (講義時間) 80 min (分), Q&A time (質疑応答時間) 25 min (分)
◆ Lecture style(ex.: used projector, conducted experiments)
(講義方法 (例: プロジェクター使用による講義、実験・実習の有無など))
Presented using projector, with some active participation via class questions

- Lecture summary (講義概要): Please summarize your lecture within 200-500 words.
I provided students with an overview of energy's role in society, and how we can use it more sustainably. I started with some brief facts about Canada, including its many energy resources, before introducing my own field (energy geography), and moving on to examples of how they use energy in daily life. First I focused on showing students the things they use every day, and how energy makes those possible: trains, power lines, heaters and air conditioners, cooking, television or video games, etc. This led into discussing the environmental, human health, and other harmful side effects of using energy, including climate change. Then I talked about where all this energy comes from: resources, both renewable and non-renewable, with an explanation of those concepts in plain English. But it was also important to help students understand that "renewable" and "sustainable" are different things, so I highlighted that sustainability is about *how much* and *how often* we use energy, and more importantly, how much we leave for future generations. This was reinforced by a class activity: comparing different methods of transport, and asking students to share which they thought was more sustainable (by show of hands). I revealed the answers to

the class and offered explanations of why different choices are more or less sustainable than others after each round of raising hands. Finally, I finished by suggesting some of the many ways that students can make a difference in society through career choices that can help us manage energy use better, including different university study areas that might be of interest.

◆Other noteworthy information（その他特筆すべき事項）:

I was very impressed with the students' English level, and their willingness to ask questions. I have given guest lectures to undergraduate Japanese students who have been more shy about asking questions in class. They also asked some very big, high-concept questions, like "Can Japan really reach net zero carbon emissions?" and "What can we do about climate change while we're still students?" On top of that, there was very good attendance—I had not expected to lecture to forty students on a Saturday morning.

This was a very good experience for me and I would highly recommend other JSPS postdoctoral fellows pursue the opportunity if it arises.

- Impressions and comments from the accompanying person（講義補助者の方から、本事業に対する意見・感想等がありましたら、お願いいたします。）:

The lecture was very impressive and well done.

