

(For JSPS Fellow)

Form B-5

Date (日付)

21/10/2015 (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): Nicola Clark _____ (ID No. P 14799)

- Participating school (学校名): Ichikawa Gakuen, Chiba

- Date (実施日時) : 16/10/2015
(Date/Month/Year: 日/月/年)

- Lecture title (講演題目): (in English) What can a sea shell tell us about climate?

(in Japanese) 海の貝が教えてくれる気候とは何か?

- Lecture summary (講演概要): Please summary your lecture 200-500 words.

I introduced myself, my academic history and my home country (UK) and gave some more specific information about my University and famous scientists from the UK. I then explained why I became a researcher and the benefits of learning English for research development. This was followed by an explanation of why I choose to come to Japan to continue my research. Moving on from my introduction, I briefly outlined geology as a subject and introduced some basic principles and theory behind geological study and the geological time scale, as well as showing different types of rocks and fossils. I then proceeded to describe my research subject and the basis for it, as well as why it is important in today's society. I went into further detail explaining the ENSO (El Niño Southern Oscillation) phenomenon and the impact it has on today's world. This led me onto my research project, trying to reconstruct similar conditions in the past in South America with an aim of predicting future climate in this region. I introduced Chile and Bolivia and showed some images from my fieldwork in these countries. I then went through the methodology used in my research, showing step-by-step, how I collect, process and analyse the data and explain what it means in terms of climate/temperature. Within this, I discussed the principle of stable isotopes and their role in climate reconstruction, specifically sea surface temperatures. I then showed some of my data and concluded with the interpretation. I ended the talk by briefly mentioning my study abroad during my undergraduate degree and the benefits it can bring. After the talk, I introduced the practical session in which the students could examine a number of different specimens including bivalve shells, a stalactite and a coral, to identify the internal features that are used for climate reconstruction data collection. This session also allowed for individual conversation and questions.

- Language used (使用言語): English

- Lecture format (講演形式):

◆Lecture time (講演時間) 50 min (分), Q&A time (質疑応答時間) 30 min (分)

◆Lecture style (ex.: used projector, conducted experiments)

(講演方法 (例: プロジェクター使用による講演、実験・実習の有無など))

Used a projector for the talk followed by a practical session to show the students real samples and talk to them individually

◆Interpretation (ex.: assistance by accompanied person, provided Japanese explanation by yourself) (通訳 (例: 同行者によるサポート、講師本人による日本語説明))

Some details and instructions were translated by a teacher at the school

◆Name and title of accompanied person (同行者 職・氏名)

N/A

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

- Impressions and opinions from accompanied person (同行者の方から、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。):

N/A