

(For JSPS Fellow)

Form B-5

Date (日付)

14/10/2016 (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): Richard Taylor (ID No. P 15364)
- Participating school (学校名): Ichikawa high school
- Date (実施日時): 30/09/2016 (Date/Month/Year: 日/月/年)
- Lecture title (講演題目): (in English) Lasers: A Solution Awaiting a Problem
(in Japanese)
- Lecture summary (講演概要): Please summary your lecture 200-500 words.

It was a privilege of mine to be able to participate in the JSPS science dialogue program at Ichikawa High School. I gave a presentation on Lasers and my current research.

Initially I told the students about myself and the United Kingdom. In particular I discussed Sheffield, where I had conducted my PhD, explaining what it was famous for. I explained about my hobbies, and why I had decided to conduct research in Japan.

Next I worked through the basic Physics of lasers, explaining how they operate and discussing their unique properties. I then discussed the history and development of laser technology, focusing on major developments discoveries. I highlighted that at first the uses of the laser seemed limited and it was described using this quotation "We are used to having a problem and looking for a solution. In the case of the laser, we already have the solution, we just have to find the problem".

I discussed with the students the current existing laser technologies and applications, demonstrating that they are ubiquitous and a significant technology across all walks of modern life from medicine to physics.

Next I discussed possible future laser developments and why we might want to continue working/researching them. I also discussed the research I conducted during my PhD and continue to work on now.

Finally, there was a Q and A session between myself and the students. They asked many questions and we had a long discussion.

- Language used (使用言語): English

- Lecture format (講演形式):

◆Lecture time (講演時間) 80 min (分), Q&A time (質疑応答時間) 40 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))

Lecture using a projector

◆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))

None

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

None

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

none

- 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。):