SD4297

※弊会記入欄

（学校用）

様式 A-1

(FY2023)

2023年　6月　15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: 浦和明の星女子中学・高等学校　上原瑛子

2. 講師氏名: Dr.Chien-Yu LIN

3. 講義補助者氏名: なし

4. 実施日時: 2023 年 6 月 10日（ 土 ） 10:00 ～ 12:00

5. 参加生徒:　1 年生　29 人、2 年生　18 人、3 年生　3 人（合計　50 人）
   備考:（例:理数科の生徒）　希望者

6. 講義題目: A Social Environmental Perspective on Reserching and Reducing the Behavioural Risk Factors of Premature Mortality

7. 講義概要:

Example Study I "Can Means Restriction Reduce Suicide Deaths?"

Suicides by carbon monoxide poisoning from burning charcoal increased markedly and contributed to a rise in overall suicides in Taiwan in the early 2000s. A previous study indicated short-term effectiveness in reducing suicides of a charcoal restriction programme, which was to move charcoal bags from open shelves to locked cabinets starting from 1st May 2012, in New Taipei City, Taiwan. We found no difference between the intervention and comparison cities in step changes in the rates (per 100,000) of charcoal-burning suicide and overall suicide after the intervention, or changes in trends in charcoal-burning and overall suicide rates before and after the intervention. We concluded that the charcoal restriction programme in New Taipei City showed no effect on reducing charcoal-burning or overall suicides in the five years after its implementation. Future means restriction strategies for suicide prevention should optimise the programme sustainability, ensure the comprehensive means restriction, and monitor the long-term intervention effectiveness.

Example Study II "What Causes the Health Inequalities?"

We examined the potential mediating roles of domain-specific physical activities and sedentary behaviours in the relationship between area-level socioeconomic status (SES) and cardiometabolic risk. Higher SES was associated with a lower CCR score. Lower SES was associated with less frequent walking for transport, lower vigorous-intensity recreational physical activity, and higher TV time, which were associated with higher CCR scores. However, higher SES was associated with longer sitting time for all transport modes and in cars, which were associated with higher CCR scores. The relationship between area-level SES and cardiometabolic risk may be partially explained by walking for transport, vigorous-intensity recreational physical activity, and TV viewing. These findings, which require corroboration from prospective evidence and further clarification of the role of transport-related sitting and occupational physical activity, can inform more-targeted initiatives addressing socioeconomic inequalities in cardiometabolic health.

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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 90 分 質疑応答時間 30 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

㊒ ・ 無 （どちらかに〇をしてください。）

使用教材 プリント配布、校内図書館にコーナーの設置

9. その他特筆すべき事項:なし

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Form B-2
(FY2023)
Must be typed

Date（日付）
13/06/2023 （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）: Chien-Yu Lin （ID No. P22105 ）

- Name and title of the accompanying person（講義補助者の職・氏名）
NA

- Participating school（学校名）: Urawa Akenohoshi Girls' Senior High School

- Date （実施日時）: 10/06/2023 （Date/Month/Year:日/月/年）

- Lecture title（講義題目）:
A Social Environmental Perspective on Researching and Reducing the Behavioural Risk Factors of Premature Mortality

- 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） 90 min（分）, Q&A time（質疑応答時間） 30 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））
used projector

- Lecture summary（講義概要）: Please summarize your lecture within 200-500 words.
The on-site lecture was designed with the aim of providing an English-friendly environment for the students to be exposed to and learn the connections between science and life. It included two main sections within the 90 minutes: i) an introduction of myself and my hometown; and ii) a sharing of the concept of behavioural science and some of my published works. In terms of the introduction of myself, I briefly provided the background of my hometown (i.e., Taiwan) such as the location, area, population, and culture as well as my motivation to pursue an academic career and research interest. This section aimed to expand the students' international perspectives with increased awareness of appreciating different cultures and provide an individual story for them to develop and dig out their interests. For academic research, I shared my work experiences in scientific research and insights into the characteristics/abilities needed for being a scientist. Afterwards, I shared two recently published works as examples to let them know what scientists did. One of them aimed to evaluate the government's policy on reducing premature mortalities by restricting people's accessibility to one specific suicide means, and the potential reasons

explaining no effectiveness found through telephone and field surveys. The other one aimed to identify the phenomenon of socioeconomic inequalities in cardiometabolic health and further examine underlying behavioural mechanisms. Both of these works targeted the health risk in the population and the students could be easily related (e.g., people living in affluent neighbourhoods are likely to be healthier than those living in disadvantaged neighbourhoods). Such materials were expected to provide a context close to their lives and intrigue their interests in science.

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

I prepared an outline and PowerPoint slides for the students so that they could preview and have an image of the lecture. It seemed to work and have positive feedback because they were proactive in showing their curiosities and asking questions during the Q&A section and after the lecture. I supposed that these materials seemed to be helpful for the students to learn new things.

- 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。）: NA


Things You May Need for Being A Scientist
Characteristics
Abilities
Passion
Patience
Language
It is not my work, it is my passion
GOOD THINGS TAKE TIME
EVIDENCE
Curiosity
Evidence-based
Collaboration