It was amazing to watch the teams transform from two groups of students from Japan and UK into one group of bright, intelligent young people wrestling with a problem. The benefits of this are obvious. There is no better way for my students to learn that science is an international activity underpinned by collaboration.

(UK Teacher)

This trip has been awe-inspiring. It has changed me and my outlook on life and science. I have had the time of my life in Japan and I will always remember this trip and everything that happened for an extremely long time. I cannot again thank you enough.

(UK Student)
The 2007 UK-Japan Young Scientist Workshop enabled 20 post-16 students accompanied by 8 teachers from 7 British schools to travel to Kyoto to live and work for a week in small UK-Japanese teams with 20 Senior High School students from 4 Kyoto Super Science High Schools and Japanese scientists from the Kyoto University of Education, and at the end of the week to give public presentations of their achievements together. The overall aim for the school students was that they should experience science

- as a real life challenge where answers are not known, where questioning is valued, where they think for themselves, and where they work to an endpoint of team public presentations of their achievements

- as a cultural bridge where by working together they learn to value each other and form lasting friendships

- as a context where they are encouraged to debate, discuss, question and communicate their own opinions

Five projects were devised by the Japanese Kyoto University of Education scientists with advice from Clifton Scientific Trust in plasma physics (led by Dr Kazunari Taniguchi with Dr Masako Shindo from Yokohama National University), immunology (led by Professor Tomohide Hosokawa), on stirling engines (led by Prof Fumitaro Sekine), on prediction and measurement of pH in relation to the chemical transport of carbon in natural waters (led by Dr Hiroshi Mukai) and on the microfauna of streams and soils (led by Prof Toshiaki Matsura). Each team was supported by one or two Japanese teaching assistants, and a team of 7 Kyoto University of Education student volunteers supported the workshop as a whole.

The structure of the week followed closely the pattern developed by Clifton Scientific Trust in previous Workshops, organized very effectively by Mr Kazunori Takayasu and Mr Tetsuro Takada of Kyoto University of Education attached Senior High School. Organisation from Clifton Scientific Trust was provided by Dr Eric Albone and Dr Toru Okano, both of whom attended the Workshop.

The students were sent brief summaries of the projects before arrival at the Workshop (welcome to your project, what we will be doing, why it is important, when you arrive, key words and expressions, preparation, web references) and were allocated to the individual projects on the basis of their preferences. This was the first such Workshop in which Japanese scientists took the lead in this way and the outcomes were excellent. The student presentations were recorded on video and copies of their Powerpoint presentations were collected. At the end of the Workshop, students, teachers and scientists completed detailed evaluation questionnaires, and the students were also invited to send write short essays of their experiences of the workshop.

Dr Okano and Dr Albone have been invited to report on this and previous workshops at the “Form-It; Bridging the Gap between Research and Science Education” International Conference supported by the European Commission in Vienna, March 2008 as an example of good practice in international collaboration between professional science and science education.
The schools were selected on the basis of strong and continuing senior management support for the Workshops and the teams of students participating were selected by the schools themselves. Our aim is to establish a continuing nucleus of committed schools and to seek in the future to extend that nucleus.

As well as providing pastoral support for the students, the presence of the teachers (who did not take part in the projects, but were welcome to observe) enabled the workshop experience to be taken back into their schools, and also enabled them to share good practice in areas related to “science for real” with teachers from the other country. One intended outcome is to foster continuing links between the schools involved. While this continued informally throughout the workshop, a Teachers’ Meeting was organised on 22 August by Prof Tadayuki Murakami from Kyoto University of Education with formal presentations, break out sessions and discussion between teachers from both countries. 19 different teachers were involved in various ways from the 4 Kyoto Super Science High Schools and the Teachers’ Meeting was attended by further local teachers. The workshop was also observed by Mr Miyata Kimito (Vice Principal) and Ms Yoshiko Shimoyamada from Hitachi First High School as there is interest in running a future UK-Japan Young Scientist Workshop in Ibaraki Prefecture.

Because of difficulties with the flight arrangements, the UK party arrived in Kyoto on 17th August, two days earlier than originally planned, and these additional days in advance of the Workshop proper added considerably to the value of the Workshop for all participants, and enabled Mr Takada to enhance the wider experience of Japanese culture which had already been built into the workshop programme. In this context, in addition to the evening events which included an outstanding cultural exchange evening at which each school team put on a “show” of some aspect of life in their own country, and an evening of Japanese traditional music in which every student had the opportunity to play the koto, there was also a visit to Konnichian to experience the tea ceremony and to Ikenobo with an afternoon of practical flower arrangement. There was also a visit to Higashi Honganji Temple where the students were given an insight into the engineering aspects of the restoration work in progress, including a tour into the roof. As well as providing an introduction to cutting edge science the Workshop demonstrated the many dimensions in which science can both grip the imagination of young people and also provide a powerful context for cultural exchange.

There is real interest both among the British and the Japanese participants in finding ways to extend and develop the UK-Japan Young Scientist Workshops in the future and this has been helped by the recognition given to Dr Albone in the form of one of the two the Japan Society Awards for 2007 for this work. Following the Workshop Dr Albone and Dr Okano remained in Japan until August 29th travelling to Tokyo and to Hitachi City to discuss the future development of the Workshops. This included substantial discussions with the Chemical Society of Japan (including Mr Teruto Ohta, Executive Director and Dr Takashi Ito, Chair Council of Chemistry Education), the British Council (including Mr Hugh Oliphant), Waseda University (including Prof Kazuyuki Kuroda), with MEXT (including Mr Hideto Matsumoto, Mr Toru Sasaki), JST (including Mr Yoshiyuki Maeda) and Miraikan (including Dr Noriyuki Inoue), and in Ibaraki Prefecture with staff of Hitachi First High School and Mito High School (including Hitachi Vice Principal Mr Miyata Kimito and Ms Yoshiko Shimoyamada).
and staff at Tokai Research and Development Centre, Japan Atomic Energy Agency (including Dr Zenko Yoshida, Deputy Director General, Nuclear Science Research Institute) who wish to be involved in a future Workshop in Ibaraki Prefecture.

Clifton Scientific Trust thanks the Daiwa Anglo-Japanese Foundation, the Department for Innovation, Universities and Skills, and the Great Britain Sasakawa Foundation, and in Japan the Ministry of Education, Culture, Sports, Science and Technology and the Japan Science and Technology Agency for their generous support for the 2007 UK-Japan Young Scientist Workshop, and also numerous individuals who gave their time and energy free of charge, and also to the many participants who made voluntary donations to the Trust.

We also thank the Royal Society of Chemistry and Japan Air Lines who hosted gratis and sponsored a Reception highlighting the UK-Japan Young Scientist Workshops at Burlington House on 5 July 2007, addressed by Lord Jenkin of Roding as Patron.

The Workshop is formally endorsed by the Embassy of Japan.
日英高校生、科学を議論 京教大で40人が研究発表

8月23日20時31分配信 京都新聞

日本と英国の高校生が一緒に取り組んだ研究を発表した「日英高校生サイエンスワークショップ」
（京都市伏見区・京都教育大）

京都と英国の高校生が協力して科学の研究課題に取り組む「日英高校生サイエンスワークショップ」（京都教育大主催、京都教育大付属高主管）の発表会が23日、京都市伏見区の京都教育大で開かれた。グループごとに進めた水生昆虫の観察などの研究を、高校生たちが発表した。

スーパーサイエンスハイスクール（SSH）の事業の一環として2004年から開いており、京都での開催は初めて。SSH指定校の京教大付属高、立命館高、府立洛北高、市立堀川高の4校と、英国はジョージ・アボット高等6校から、両国20人ずつの高校生が参加した。

ワークショップは20日に開幕。日英それぞれ4人ずつのグループに分かれ、理論と実験による水の成分分析やハブカネズミの解剖による免疫の研究など5つのテーマに取り組んだ。土壌動物と水生昆虫がテーマのグループは、貴船川で採取したトビケラやカゲロウの形態を観察して分類した結果を報告。「京都とイギリスの昆虫はどう違うか」など活発な議論を交わした。

最終更新:8月23日23時19分