# Science Class of "Charcoal" for high school students in Jogjakarta, Indonesia

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### Schedule of our class

Date	School	Details of class
20 <sup>th</sup> Feb	SMA3	Science class Grade 10 <sup>th</sup> 26 students
24 <sup>th</sup> Feb	SMA6	Science&Social class 10th & 11th grade 20 students
25 <sup>th</sup> Feb	SMA6	Science&Social class 10th & 11th grade 20 students

## Detail of our class

#### OOur class

#### Title: New Challenge to Raise Crop Yield

 We made our class based on our research, "Effect of charcoal in the soil"

#### **OFlow of the Lesson**

- Introduction(About Japan and us)
- Experiment
- Explanation about property of charcoal
- Introduction of our research

#### OLook of the class

- Students warmly welcomed us.
- We joined the students' groups and did experiment together.
- Results of experiment were different from our expectations, but we could explain the reason.
- Many students were interested in our research and asked us many questions.

#### OReflection

1 How to explain difficult words and theory

- < Words >
  → Changed
  to easy word
  (nourishment
  ⇒ nutrient)
- < Theory >

  →gave the
  quiz

  →used the
  model
- ②How to involve students→the timing and frequency of questions to the students
- 3Added slide depending on students' situation(questions)
- →how to prevent the global warming
- →the creation process of the charcoal
- →the supplementary explanation of the control experiment





#### Materials of "Kairo"

## OComments from students Good points

- The experiment was very fun!
- I was surprised because charcoal had big function for our daily lives.
- I hope your experiment will success.
   Improvements
- •I didn't understand some because English is not my native language.
- →Speak more clearly and simply



We improved each lesson little by little, so we and students had a sense of fulfillment at the last class.

#### **OConclusion of our class**

- Try to communicate with students
- Introduce real research in university
- Step up as a teacher



## Impression of Jogjakarta



#### **OWedding**

We joined the wedding of Andung who came chiba university last summer. It was held in UGM.

We noticed many differences in wedding style of Indonesian and Japanese. Especially, we were attracted by the color of the dress

which the bride and groom wear. In Japan, white is common, so we does not see the black dress like this. However, this wedding style was so beautiful, too.

#### **OFoods**

We tried many traditional Indonesian foods. Many of them are very spicy and delicious. There are many tropical fruits, and traditional drinks. We experienced the way they live.



#### **OSchool**

We went to SMA 3 and 6. Both of them have many greens, and there are good atmosphere to study. We were surprised at the English level of these high schools. I was so impressed that I asked and got a chance to see the class of Mr. Heru, the English teacher of SMA 3.

Another surprise is the research from the students. I was also so impressed because they can conduct high level researches. Their researches were very authentic because they are in ecological and traditional point of view.





## Reflection of This Program and Vision of the Future

At the beginning of June, we were afraid of participated in this program. Because teaching in different culture in English is difficult for us.

In order to make success in our science class, we studied English so much, and we discussed how to manage to communicate with students, and how to express what we wanted to say from various points of view.

At last, we could conduct our class proudly, and we could make the most of students satisfied.

The various abilities we got in this program are comprehensive abilities to solve a problem and to communicate with people.

For example, we can think about a problem from wider point of view, or we can communicate with people more effectively. These abilities are useful in any situation. Even if we are in Japan, and with Japanese people, these abilities must be very useful.

From now, we will use these abilities in the situation of solving a problem, and we will make it a power to forward things.

And now we realized that we can make considerable progress by taking on a difficult challenge. When we get a chance like this, we will participate in that again.