

## Topic: LIQUID CRYSTAL DISPLAY

Unit: G  
Place Visited: SMA38  
SMAIT NURUL FIKRI (University of Indonesia)  
Duration: 18 February – 3 March 2013  
Name: Masaya Ninoyu  
Affiliation: Faculty of Science

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### 1 Objective

In this lesson, each student was expected to:

- create an LCD;
- state the scientific principles behind LCD; and
- infer why LCD is used for display and what is issues of LCD

### 2 Flow of the lesson

The lesson was conducted for 45 minutes each to four classes (figure 1). One class in SMA38 had 34 students, while the other class in SMAIT NURUL FIKRI had 63 students. Table 1 summarizes the flow of the lesson.



**Figure 1.** The students at work

**Table 1.** Flow of the lesson

<b>Time Allotment</b>	<b>Activity</b>	<b>Materials</b>
10 mins.	I. Introduction of the lesson A. Self-introduction B. Introduction 1. LCD in our daily life 2. Objective of the lesson 3. What is LCD C. Explain the experiment's procedure 1. Materials 2. Gently rub the electrode 3. Mix Glues 4. Assemble the electrodes 5. Inject Liquid Crystal 6. Construct the circuit and check the LCD	Power Point  Electrodes, Glues, Polarizer Film, Liquid Crystal, Battery
30 mins.	II. Experiment - While the students were doing experiment, the teachers-in-charge made rounds to assist them. - If electrodes were assembled, teachers injected the liquid crystal.	
5 mins.	III. Conclusion A. Think about the advantages and disadvantages of LCD. B. Introduction to the next generation of displays.	Power Point

3 Realizations

These were the realizations of our group after we had our internship in Indonesia.

Plus points

- a. It was a first time for students to make LCD but they easily understood the lesson
- b. Students were able to make simple LCD. Technically, the processes involved were the same as what many electronic industries are using.

Minus points

- a. We lacked reinforcement of safety precautions. LCDs and glues might pose harmful effects to students.

- b. The students want to know more about LCD in detail, but we did not have much time left.
- c. Some students could not touch the LCD for a longer time. We lacked prepared materials for them.

#### 4 Implications for future activities

If we had more English skills, we could smoothly and convey our knowledge. So we should obtain better communication skills. Also, using short phrases in Bahasa Indonesian is good tool to could shorten the distance between interns and the students. These basic things should come in handy prior to internship.

Based on our experience, we also realized that it is necessary to bring extra experiment kits.

## Topic: JAPANESE CULTURE LESSON -*Shogi* game-

Unit: G  
Place Visited: SMA38  
SMAIT NURUL FIKRI (University of Indonesia)  
Duration: 18 February – 3 March 2013  
Name: Tomoko Kunikane  
Affiliation: Faculty of Education

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### 1 Objective

In this lesson, each student was expected to :

- acquire skills in playing, “Shogi,” and
- become interested in Japanese tradition through playing games.

### 2 Flow of the lesson

We taught students from University of Indonesia and Nurul Fikri high school how to play *Shogi*. In order to teach the lesson to UI, it took us an hour; about 45 minutes was spent in Nurul Fikri. The students from UI were not fixed; they can come and go to our class during their free time. We had 65 high school students in Nurul Fikri.

For the lesson, printed 30 sets of *Shogi* and brought two real ones. The printed *Shogi* sets were written in Roman alphabet, and translations were also included; for example, *kin-syou* had the word “gold” because “*kin*” means gold or money, and it was written as “*kin-shou*” in the Roman alphabet.

Moreover, the real ones caught the students’ interest and motivation because the set was entirely new to them; i.e. the size, smell, and texture of the game pieces were first-hand experience for them (figure 1).



Figure 1. Left: Shogi game pieces

Third, we conducted a class of Japanese culture as shown in table 1 below.

**Table 1.** Flow of the lesson

Activity	Time Allotment
Explanation a. Introduction to shogi b. materials to play c. the rule d. others	10-15 mins.
Playing <i>shogi</i> game	25-40 mins.
Sharing their impressions	5 mins.

First, we introduced *Shogi* (figure 2) as follows: a) How to play the game; b) Pieces' names and board; c) How to move the pieces and how to win; and d) The difference between chess game and *Shogi*.



**Figure 2.** Introduction to Shogi

Secondly, we asked the students to find his/her partner or to form groups. After that, they received a set of *Shogi*. In this lesson, we prepared a mini match game, which used five by five board area and 6 playing pieces. While they played *Shogi* with his/her partner or group members, we made ourselves available for questions or for any assistance. If they needed any help, we supported them according to the situation. Also, if they seemed tired or bored with it, we called their attention and introduced Break *shogi* mountain. This game could accommodate as many players as possible.

Finally, we asked the students to share their impressions and/or questions.

### 3 Realizations

These were the realizations of our group after our internship in Indonesia. It seemed that most of the students could easily play *Shogi*. Probably, this was expected because many of them could also play chess. However, it was difficult for them to distinguish the game pieces' names because they were written by kanji. Also, though we wrote the names in the Roman alphabet, they could not instantaneously memorize or distinguish them. They significantly relied on the color, which helped them recognize each piece. Another difficulty was how to move the pieces. That is probably because they could not distinguish the pieces.

Some students also got interested in other Japanese traditional games they know. For instance, one student asked us if we had *igo* or something like that. Other students also asked us where in Indonesia they could buy Japanese traditional board games.

Moreover, some students associated chess game with *shogi* game. Some students asked us the similarities of game pieces between chess *Shogi*, i.e. “*ou-shou*” is “king” in chess. Actually, we were ready to answer what the different point between chess and *shogi* game, but we did not prepare the answer about any similarities. If we did, the lesson could have been more informative for students.

### 4 Implications for future activities

Game boards, including *Shogi*, have several ways of playing them. Through *shogi* activity, we realized that the students wanted to challenge themselves in many ways. We expected that playing *Shogi* mountain would not be fun for them. In fact, break *shogi* mountain is for Japanese children, but Indonesian students wanted to play it. We thought that we should not limit how to play board games according to their age.

However, when we asked them to play using a 9x9 board area and 20 game pieces, some students accepted the challenge, while some said it was too difficult for them. When we asked why, they said that they had to account for too many game pieces, and they still were not able to master playing the basics of the game. In the future, we should carefully plan our activities, so that students can enjoy all throughout the lesson.

## Topic: CULTURAL EXCHANGE WITH INDONESIAN PEOPLE

Unit: G  
 Place Visited: SMA38  
 SMAIT NURUL FIKRI (University of Indonesia)  
 Duration: 18 February 2013 – 3 March 2013  
 Name: Shino Okazaki  
 Affiliation: Faculty of Education

### 1 Objective

In this internship, we wanted to:

- deepen our understanding of Indonesian culture; and
- have a lot of meaningful conversations regarding Indonesian culture and Japanese culture.

### 2 Flow of our activity

We met a lot of Indonesian people and had much intercultural exchanges. Table 1 summarizes the schedule of our itinerary.

**Table 1.** Itinerary

Date	Activity
21 February (Th) (after our lesson)	1. Exchange among students in SMA38 *Listen to songs played by Indonesian students *Play “Origami” (Figure 1)
22 February (Fri)	2. Exchange among students in UI *Introduce to “Shogi” *Play “Shogi” (match game)
24 February (Su)	3. Tour to “TAMAN MINI INDONESIA INDAH” (Figure 2) *Go to Museum of Indonesia *Visit to Indonesian traditional house *See and touch komodo dragons *Visit to an aquarium *Ride the Sky lift
26 February (Tu) (before our lesson)	4. Feedback from students in SMIT NURUL FIKRI
01 March (Fri)	5. Visit to Bogor City *Work and see plantation *Go to “Kebun Raya Bogor” (Figure 3)



**Figure 1.** Origami

Originally, we didn't plan to let the students play "Origami." When we gave a paper crane after our lesson, some students asked us to teach them some "Origami," such as a paper crane, a throwing Knife, among others.



**Figure 2.** Taman Mini Indonesia Indah

At the end of the first week, we went to "TAMAN MINI INDONESIA INDAH" with Group F of Chiba University and friends from Indonesia University. In this theme park, we could see many Indonesian traditional clothes, house, and animals, among others. Indonesia has many islands and regions, so they have

various clothes, houses, animals in every region.



**Figure 3.** Visit to Bogor City

A couple of days prior to our departure, we went to do some sightseeing in Bogor with friends from Indonesia University. We met a lot of people at the plantation and at "Kebun Raya Bogor." Wherever we went, people were always very kind and friendly. Also we got to know about Indonesia of the colonial period.

### 3 Realizations

These were the realizations of our group after we had our internship in Indonesia.

In general, Indonesian people were very kind and friendly to us. It was also noteworthy that Indonesian students seemed to be more active than Japanese students; they had such insatiable thirst for knowledge.

We learned that Indonesia's a country with many islands and regions. This topography might be the reason why the country seemed to be diverse in so many ways, such as clothes, houses, and animals. Indonesia gained



independence from Holland in 1949, and Japan surrendered to the Allied Forces in 1945. Some students wanted to know why these two countries were different, but we could not respond to their queries.

#### 4 Implications for future activities

When we were asking some feedbacks from students in SMIT NURUL FIKRI, one student asked us that “How did Japan recover after the bombing incidents of Hiroshima and Nagasaki?” Unfortunately, we were quite ignorant with regard to Japanese history. This incident made me realize how important it is to be adept of one’s own culture and history.

Being able to speak some Indonesian phrases seemed very helpful for us. When we uttered some Indonesian words, the Indonesian people looked very happy. We were also very happy when Indonesian people spoke some Japanese. So, if we want to promote international understanding and intercultural exchange, this basic information should be considered.

## Topic: THE PRIOR AND SUBSEQUENT TRAINING IN UNIVERSITAS INDONESIA

Unit: G  
Place Visited: SMA38  
SMAIT NURUL FIKRI (University of Indonesia)  
Duration: 18 February – 3 March 2013  
Name: Takuya Tokuda  
Affiliation: Faculty of Science

Science lesson: EXPERIMENT ON LCD.  
Japanese Culture lesson: Let's play "Shogi!"

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### 1 Objective

In this training, each participant was expected to:

- revise and check the teaching materials, based on the feedback of teachers and students in UI; and
- share some insights regarding the lesson and experiences during the internship program (subsequent training; figure 1).



Figure 1. A teacher giving some suggestions (subsequent training)

### 2 The training

The training had two sessions. One was prior to our lesson, while the other was after we had our teaching experience in UI. Each training are

described as follows:

The prior training (19 February)

Some students and teachers from the University of Indonesia gave us suggestions on how to improve our science and Japanese culture lesson. They were very concern about the liquid crystals, which might be harmful for human being. Table 1 summarizes the flow of the training during this session.

Table 1. The prior training.

<b>Time Allotment</b>	<b>Activity</b>	<b>Materials</b>
30 mins.	I. Presentation of the lessons A. Science lesson B. Japanese culture lesson	(Explanation only) Use Shogi game board
20 mins.	II. Discussion	

The subsequent training (28 February)

We presented and discussed the results of our teaching experience. There was also a brief presentation about the TWINCLE programs. Table 2 shows a summary of the activities during this session.

Table 2 . The subsequent training.

<b>Time Allotment</b>	<b>Activity</b>	<b>Materials</b>
10 mins.	I. Summary of the lessons A. Science lesson B. Japanese culture lesson	The result of questionnaires by SMA NEGERI 38 and SMAIT NURUL FIKRI
30 mins.	II. Feedback from the teachers III. The TWINCLE Program	

3 Realizations

These were the realizations of our group after we had our internship in Indonesia.

Plus points

- a. The theme that we chose attracted the interest of the students.
- b. The students carried out the experiment. The lesson was student-centered.

- c. According to the result of some questionnaire, some of the students enjoyed and understood how to make LCDs work.

Minus points

- a. The number of teaching materials was not enough
- b. It was too humid to take a charge the static electricity.

4 Implications for future activities

Based on our experience, we realized that preparing the teaching materials is a very important task. Well preparation will guarantee success. Our English expressions may not be adequate, but other things such as visual aids, and facial expressions can help convey our messages to the students. Maintaining eye contact is also important. By doing so, good communication, which is one of the most important things in teaching and learning, can be well established.