

Topic: OPTICAL ILLUSION

Unit: E
Place Visited: Bandung Institute of Technology
Duration: 11 February – 24 February 2013
Name: Saori Toyota
Affiliation: Faculty of Engineering

1 Objective

In this lesson, each student was expected to:

- infer that one of optical illusions happen in our brain and/or in our optic nerves;
- experience optical illusion by making Benham's spinning top; and
- state ways on how optical illusions are used in our life.

2 Flow of the lesson

The lesson was conducted for about 60 to 90 minutes. We had 1~3 classes in one school. We focused on two kinds of optical illusion; i.e. the checkers illusion (fig.1) and the afterimage effect (fig.2), respectively. We also tried to explain how these illusions occur in our brain. The spinning top illusion was the activity of the lesson.

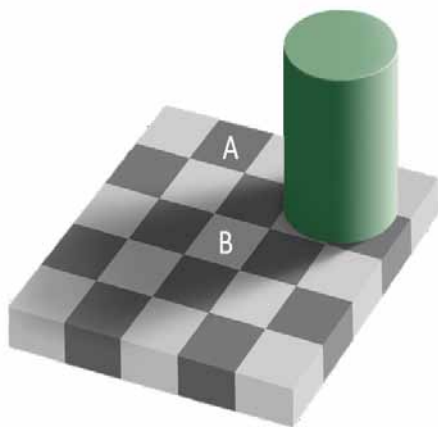


Figure 1. Checkers illusion

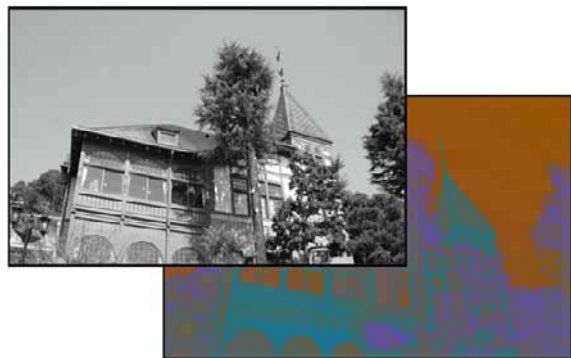


Figure 2. Afterimage

Table 1. Flow of the lesson

Time Allotment	Activity	Materials
5 mins.	I. Introduction - Self-introduction	
25 mins.	II. Development A. Figure 1 - Discussion: “These types of optical illusions happen in our brain.” B. Figure 2 - Discussion: “These types of optical illusions affect our optic nerves.”	Power point Power point
30mins	III. Simple activity A. Benham’s spinning top B. Discussion - “How does this optical illusion occur?”	Paper, string, marker, pencil Power point
10mins	IV. Conclusion A. Applications of optical illusions in daily lives B. Review concepts learned for the day	Power point

3 Realizations

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

Plus points

- a. Students had keen interest in optical illusion.
- b. Using actual optical illusions highly motivated the students.
- c. Students were very curious as to why colors could be seen on the spinning top
- d. Many students understood the concepts very well, based on their questions and facial expressions.

Minus points

- a. It was a little difficult to finish the activity in a very limited time
- b. We thought that our communication skills were deemed not enough.

4 Implications for future activities

In our lesson, we needed to consider a lot of things like the time allotment, materials, and equipment. Aside from these, we have to think of effective strategies to facilitate students' understanding of optical illusions. Maintaining eye contact and confirming their understanding helped us smoothly execute the lesson.

Topic: JAPANESE SCHOOL LIFE

Unit: E
Place Visited: Bandung Institute of Technology
Date: 11 February - 24 February 2013
Name: Miana Hayashi
Affiliation: Faculty of Education

1 Objective

In this lesson, each student was expected to:

- become familiar with a typical school life of Japanese high school juniors and seniors; and
- be able to infer why cultural differences are inevitable.

2 Flow of the lesson

The lesson was conducted for 45-90 minutes each to 7 classes; i.e. two lessons were provided for the juniors and five lessons for the seniors. The class size varied; some had 30 students, while some had 60 students (figure 1). Table 1 summarizes the flow of the lesson.



Figure1. The juniors

Table 1. Flow of the lesson

Time Allotment	Activity	Materials
10 mins.	I. Introduction A. Self-introduction B. Introduction to Chiba university	Power point presentation
30 mins.	II. Development A typical school life of a junior high school student 1. School uniform 2. Daily timetable 3. Clubs 4. Other activities A typical school life of a senior high school student 1. School uniform 2. Daily timetable 3. Extra-curricular activities 4. Other activities	Power point presentation Pictures
5 mins.	III. Conclusion Question-and-answer portion	

Tidbits about the lesson

When we gave an introduction to club activities in Japanese high schools, we integrated concepts like Japanese anime, mock cavalry battle and three-legged race. Even the teachers seemed to become engaged in our lesson.

3 Realization

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

Plus points

- a. Using Indonesian language to introduce our group was effective. We became more relaxed, and the students thought that they could openly connect with us.

- b. Demonstrating how to play the mock cavalry battle and the three-legged race made the students excited.
- c. Based on the facial and verbal expression of the students after class, it appeared that we successfully met our objectives.

Minus Points

- a. We were not able to bring some objects related to our topic.
- b. Our lesson should be more activity-based.

4 Implications for future activities

It would be very helpful if the student-interns could know the number of students in advance. Souvenirs and worksheets must be well accounted for. Conducting a survey on which topic would be very interesting for Indonesian students might also be helpful.

Topic: INTERNATIONAL EXPERIENCE IN BANDUNG

Unit: E
Place Visited: Bandung Institute of Technology
Duration: 11 February – 23 February 2013
Name: Akito Kamo
Affiliation: Faculty of Engineering

This is a simple narrative of our international experiences and realizations on our internship in Bandung, Indonesia.

Our group was assigned to go to Bandung. We taught several junior high school and high school students on Japanese school life and optical illusions. During our stay, the Japanese Culture Club (UKJ of Bandung Institute of Technology (ITB) assisted us in every way. This is the list of our activities with UKJ members.

■ The list of our activities with UKJ members

They took us to various places such as: a coffee plant, a hot spring (figure 1), and a morning market, among others. They also taught us various things about

Day	Activity	Place
Feb. 11	<ul style="list-style-type: none">• Campus Tour• Visiting UKJ	ITB
Feb. 14	<ul style="list-style-type: none">• Going to karaoke with UKJ Members• Visiting student's event in ITB	Bandung city ITB
Feb.15	<ul style="list-style-type: none">• City tour in Bandung	Bandung city
Feb.16	<ul style="list-style-type: none">• Going to day market	
Feb.17	<ul style="list-style-type: none">• Visiting Saung Angklung Udjo• Campus Tour #2	Bandung city ITB
Feb.18	<ul style="list-style-type: none">• Visiting UKJ #2	
Feb.20	<ul style="list-style-type: none">• Lecture about Japanese culture for fresh of UKJ	ITB
Feb.22	<ul style="list-style-type: none">• Visiting Java Traditional Cultural Study Club in ITB	ITB
Feb.23	<ul style="list-style-type: none">• Farewell Party in UKJ	ITB

Indonesia.

Especially I was impressed because I realized that they had so much pride in their traditional culture. I had a lot of opportunity to think about it.



Figure 1. We went to a hot spring in Bandung

UKJ members were also interested in Japanese culture. Specifically, they expressed keen interest in Japanese comic and animation. We also taught them about some aspects of Japanese cultures; for instance, we had a lesson about Japanese language and presented some traditional Japanese dance; i.e. “Sorani-bushi” with them.

Although they take pride in their own culture, I realized that Japanese culture is also loved by Indonesian people. They study hard about Japanese culture. In some areas, they seemed to be more knowledgeable on Japanese culture than us. I rediscovered the importance of knowing and loving Japanese culture through them.

By such experiences, I think we could build a friendship with them. I hope to see them in Japan someday.

Topic: PRIOR TRAINING

Unit: E
Place Visited: Bandung Institute of Technology
Duration: 11 February – 23 February 2013
Name: Masato Yoshimura
Affiliation: Faculty of Education

1. Prior Training at Chiba University

Before the internship, we had to prepare our lesson from last December. I had teaching experience, but it was new for me to cooperate and teach with students from different studying fields. The purpose of this TWINCLE program is to use those students' science backgrounds and make a theme subject of lesson in a foreign country. We had decided that our topic had to be attractive and significant for Indonesian students, it was "optical illusion". This topic was from a student who is studying image processing and we wanted to connect this topic to physics.

We had prepared our lesson plan in English, meaning that we had to discuss in English while making the lesson plan. We went through this difficulty and finished the lesson plan. On January in Chiba University, we had an opportunity to ask exchange students from Indonesia to comment on our lesson plan. At the presentation, each group gave short presentations. Even in this orientation, we could face so many culture differences. For visual tools such as PowerPoint, they preferred colorful backgrounds, and so on. The exchange students gave us not only their feedback, but also gave us various information of Indonesia. For example, their living, culture, schools, and so on. The country is not so far away, but there were many things I didn't know. The introduction of Indonesia from the exchange students made us much more excited for the trip.

2. Arrival orientation at Bandung ITB

The second day after arriving at Bandung city, we went to the campus and had our first orientation there. They gave us a brief introduction of ITB and our schedule. They also introduced us to teachers from the school we will internship with. After the introductions, we gave a presentation about Chiba University,

consisting of basic information of faculty, student life, and the circumstance of exchange students in Chiba University. Then we showed a brief version of our lesson, so the teachers could get an idea of what we would teach at their schools. In our lesson, we put tricks to catch students' attention and the tricks were also working for adults at the orientation. The teachers watching our presentation were also surprised. Afterwards, we gave a presentation of Japanese culture. It was basically about the system of Japanese Junior High school and Senior High school. We showed an ordinary school schedule and how students spent their time in school. While it was normal for Japanese teachers, the Indonesian teachers were surprised at how students took a part in cleaning the school with the teachers helping them.

3. Final presentation

After the entire internship was finished, the Chiba university students, ITB students, professors from ITB, and teachers from our internship schools gathered at campus again and shared our 2 week internship experience. We talked about our feelings after the internship and about Indonesian culture and also gave our appreciation to all the teachers. Each teacher gave short comments as well, and then the session was closed.