Let's Study About Display Unit W Katsuma Miyamoto, Terumasa Mitogawa, Wataru Nogita (engineering), Nana Ito (education) Hosted by : Gadjah Mada University (Yogyakarta, Indonesia) Presented at : SMA 3, SMA 6

Introduction

• Display technology has been quickly developed thesedays \rightarrow Display is being used even in our daily life.







<Objective>

- \checkmark To let the students understand about the mechanism of displays through the experiment
- \checkmark To let them be more curious about technologies (not only in display but also in other things)





http://blog.livedoor.jp/junkers /archives/5386069

http://techobird.com/best-laptop-computers-under-25000-rs/

ttp://pocketnow.com/2015/03/01/galaxy-s6-vs-iphone

Lesson Plan

- **1** Self Introduction, Cultures in Japan (Calligraphy, Snowboarding, Scenery, Kendama)
- (2) History of Display
- (3) Experiment; making 1 pixel of LCD (Liquid Crystal Display) Mechanism of Display
- (4) Latest Technologies in Display
- Display in the Future (5)

1st Week ; at SMA 3



Rubbing and Glueing are especially important steps and it's difficult to understand the principles.

 \Rightarrow Points of improvement •Explanation using the big model • Make the movies of every operation • Frequently ask the students whether they have questions.



- <u>70%</u> of the students could make LCD.
- They answered in Questionnaire ; > The experiment was so amazing and we found something new.
 - > They showed the experiment step by step, so I could understand it clearly.
 - > Some of the lectures voice couldn't be heard and also not clear. > Some of it were hard to understand. Several activities were too difficult. > Some of us couldn't make it and couldn't understand why.

Reflection on ourselves ; > Explanation was too one-sided for them to keep their attention.





\Rightarrow Points of improvement

- ◆ Make more times for thinking and expecting Explanation with some jokes
- Talk with louder voice
- Change in experimental method

At the last day... **100% of the students could make it !!**





Conclusion

Other activities





- ✓ We could make the students understand the display using English though we have the different native languages ✓ The students could learn about one of the amazing technologies and we also learned the pure attitude against the technology from them.
- ✓ Through various activities with the students, we could understand the different cultures.

Future plan

✓ We want to become the bridges between Japan and ASEAN through amazing technologies.