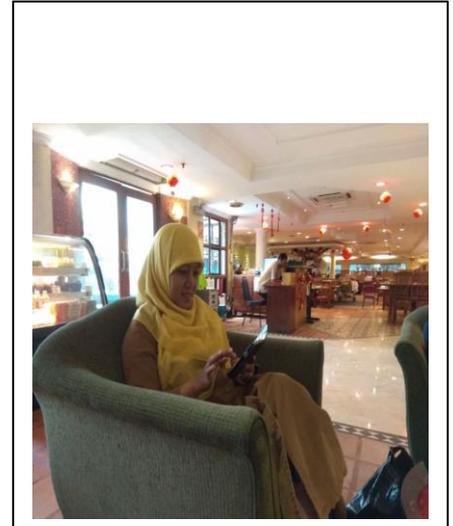**Project Title**:

USING AN IP-WEBCAM IN STUDY BIOLOGY
FOR SUBJECT: CLASSIFICATION IN LIVING THINGS

Project Description

An-IP-WEBCAM is one of free application from play store. Everyone should be permission for download that application in their android. In My Project, using an IP WEBCAM became challenges because this is the first time that IP WEBCAM have been used in our lesson. For the first time, students divide in to small group and then they will discuss to the other in their group about the subject lesson. Biology as a scientific lesson requires all of the students to be an active learner. In subject lesson : Classification in Living Things, Every group have to classified the samples from living things, such as: mollusca, insect and artopoda and then they must to explain what have their done to the other groups in front off the class using an IP WEBCAM. By connecting An android as an IP WEBCAM to the projector, the samples of living things can be seen to the other, So every students can learn together and having fun in science.

https://www.youtube.com/watch?v=sQXJorUAn5o&t=383s

School/Institutional Context

Location:Madrasah Tsanawiyah Negeri 34 (MTsN 34) Jl. Kerja Bakti VII Rt   009/ Rw.07 Kecamatan Makasar East Jakarta
Levels: Yunior High School
Student Population: 398
Staff Population:43
Year School founded:2005
Type:Public School of MORA

Transformational Action Plan (Situation-Option/s-Solutions) [approximately 800-1000 words]

Based on our school condition especially in lack of facilities, require to all the teacher improve their teaching in class. Madrasah is one of public school under the ministry of Religious. Until now, Madrasah always become the second choice from kids in Jakarta.

Laboratory as a part of science lesson has less facility, for example the microscope. Our school do not have the microscope with the best performance. Almost microscope in the laboratory have been unuseless because of a lot of reasons, such as not good enough in maintenance.

As we know that science is one of difficult lesson after math. And for madrasah, mostly our student have less intelligent so the teacher should be improve their teching in science so learning science become more interesting and more challenging for student.

My project concern in using technology IP-WEBCAM in study Biology. Maybe it can be one of solution for this situation. At the beginning, student have more couriosity to know what they will learn, how they use IP-WEBCAM and they will know another positive function from their android.

Another challenge from our students, they usually not enough confidence on their own. In Our Nation Curriculum (K-13), we have many target in teaching for every subject lesson. Making our student have confidence to talk to the other about something, it become the homework for the teacher. By dividing in to small groups, the student will learn how to speak, how to work with another people, and the most important is they know more better how technology is useful for study.

Gantt Chart

1. What is my Transformational Action Plan? What is the SITUATION that I face in my context?

Increasing student motivation in study and how to use technology being something useful

2. What options do I consider to address the SITUATION in my context? What are the implications of each OPTION?
a. Choosing one of the subject lesson as a sample (subject lesson that we use is Classification in Living Things)
b. making a lesson plan for that subjet

3. What SOLUTION do I choose given the OPTIONS that I have identified?
a. design a lesson study for subject: Classification in Living Things by using IP Webcam
b. prepare the student by give some information about what is IP Webcam
c. making a small team with the other teacher to operate IP WEBCAM

4. What EVIDENCE can I present to indicate the IMPACT of my TAP?
a. teacher get used to teaching by technology
b. enjoyable science class
c. increasing student curiosity
d. to increase understanding of student in subject lesson Classification in Living Things

Base on My Gantt Chart above, I prepare to realisation my project in to 3 steps:
1. Making a small discussion with another teacher about my project. To make them know about IP-WEBCAM
2. Introducing about IP-WEBCAM to our student. How to use and what the benefit if we use technology in study
3. The treatment.

Evidence of Transformation

TARGET RESULT

At least 60% of student from two experimental classes will show an improvement in their performance in study Biology. Student will be more engaged and interested in study Biology using ICT (IP-WEBCAM)

METHODOLOGY

Using Research and Development (R&D) Method of measurement: comparison of pre-test and post-test results (measuring of kognitive student) and by linkert scale (measuring of affective student)

Experimental Classes: O1   X1   O2

Control Classes   :   O3   X2   O4   Nonequivalent pre-post test control group design (kognitive measurement)

Note:

X1 = treatment by using IP-WEBCAM (experimental classes)
X2 = without treatment (control classes)
O1 = pre-test (experimental classes)
O3 = pre-test (control classes)
O2 = post-test (experimental classes)
O4 = post-test (control classes)

FINDINGS

Comparison of experimental and control classes

Experimental Classes

CLASSES	ENROLMENT (no of student)	KOGNITIVE IMPROVEMENT (no of students who showed Improvement)	AFFECTIVE IMPROVEMENT (no of student who showed Improvement)
A1	35	20	25
A2	37	25	30
Total	72	45	55
Percentage		62,5%	76,4 %

Control Classes

CLASSES	ENROLMENT (no of student)	KOGNITIVE IMPROVEMENT (no of students who showed Improvement)	AFFECTIVE IMPROVEMENT (no of student who showed Improvement)
A3	35	11	13
Percentage		31,4%	37,1 %

There were a total of 107 students. 72 students us IP-WEBCAM as a treatment to enhance their learning while 35 students did not. 72 students (62,5%) from the experimental classes showed an improvement. The target of 60% was met.

Critical Reflections (Lessons learned, future plans) [approximately 1000-1500 words)

Although targets were met, that is a minimum value in Madrasah. 60% is not the best mark. This is only the beginning for the teacher to improve their teaching in class by using IP-WEBCAM. Teachers will work to address the areas of improvement and implement this project for the science lesson. Choosing at the right subject also giving the influence for the student and the impact.