### **PRINCESS MAHA CHAKRI AWARD 2015**





### **A Brief Personal Information**



Full Name Place and Date of Birth Teaching Subject Length of employment Position title Organization name Province

- : Herwin Hamid, S.Pd, M.Pd
- : Kendari, 30 April 1982
- : Science
- : 8 years
- : Head of Computer Laboratory
- : Junior High School 6 Kendari
- : Southeast Sulawesi





### NATIONAL ACHIEVEMENTS AND AWARDS



- 4<sup>th</sup> Place Championship of National Competition of Technology Integration 2011 "Fun And Creative With Computer In Your Classroom "



2. 1<sup>st</sup> Place Championship of National Competition of Construction Of Instructional Interactive Multimedia 2012





 1<sup>st</sup> place championship of National Competition of Developing Mobile Learning for Education 2013 – General Category





 1<sup>st</sup> Place Championship of National Competition of Developing Mobile Learning for Education 2014 – Teacher Category



 1<sup>st</sup> place championship of National Competition of Teacher Creativity 2014 – Science Category of Junior High School





## National Awards

Anugerah Ki Hajar Award 2012
 Anugerah Ki Hajar Award 2013
 Anugerah Ki Hajar Award 2014







### Background

- The learning process done so far are still unable to visualize Physical phenomena further and more detailed making the abstract concepts are still difficult to be understood by students
- The limited use of media makes teaching and learning process tends to be monotonic and less interesting
- The lack of practicum equipments in school laboratories is also an obstacle for students to do explorations on theories and concepts of Physics furthermore
- Problems in teaching and learning process such as boredom and lowmotivated students, nuisance in classroom, and the lack of students' attention caused by drowsiness need to be overcome immediately



### **1. Using ICT in learning process**

PC Application



Smartphone Application





### **Benefits of using ICT in learning process**

- It can be used as a self-learning media
- In science subjects, it can be used as a virtual laboratory
- It can stimulate the students' curiosity, feelings, attention and willingness to learn
- Animations in applications make students understand the lessons
  much easier
- Provide a new and interesting learning experience for the learners
- It can also visualize an abstract concept of the teaching materials.



2. Simulate – Observe – Create (SOC) Learning Method



- SOC (Simulation-Observation-Creation) learning methods is a learning method that consists of three steps of learning process, e.i simulation phase, observation phase and creation phase using Virtual Experiment-based ICT and non ICT-based Real Experiment.
- This method integrates active learning, creative learning, cooperative learning and collaborative learning approaches.
- It provides an opportunity for students to construct and explore their knowledge more comprehensively.
- □ It can foster students' scientific attitude to be able to produce science products and finally enhance student's learning outcomes/achievement

#### **Step 1 : Simulate**





- As a virtual experiment
- Individual / Group Research
- To improve students understanding and allow them to manipulate variables of quantities on sceince subject

#### **Step 2 : Observe**





- As a real experiment
- Group Research
- To compare it with the theory acquired from the previous virtual experiment
- As a reference for complete the project

#### **Step 3 : Create**



- Planning a project design
- Design a project
- Developing a project
- Presenting a project
- Students collaborate in providing project, construct their knowledge, improve their creativity and their communication skills when they present their project



### The Result of the application of SOC Learning Method

- A comprehensive enhancement of student's learning outcomes that include cognitive learning outcome, affective learning outcome and psychomotor learning outcome.
- Students are encouraged to cooperate and coordinate with each other to complete a given task.
- Students become more active and creative
- Students are able to use a variety of cooperative skills such as sharing tasks, making agreement, asking questions, interpreting, presenting information, communicating and etc.
- Students really enjoy the learning process that they were following and they were involved intellectually as well as emotionally in the learning process.



### **THANK YOU**