

30<sup>TH</sup> Oct 2015

# **Presentation Outline**

- 1. Introduction
- 2. Sensitization
- 3. Teaching activities
- 4. Research
- 5. Projects and Exhibitions
- 6. Challenges
- 7. Students' evaluation
- 8. Video documentary
- 9. Recommendation

# Introduction

#### Team Members:

- 1. Daniel Maitethia (Team Leader)
- 2. Abkul Orto
- 3. Wycliffe Rono
- 4. Kinuthia Mugi

#### Sensitization



## **Teaching Activities**



## **Teaching Activities**



#### Research



Crop stress monitoring setup

#### Research

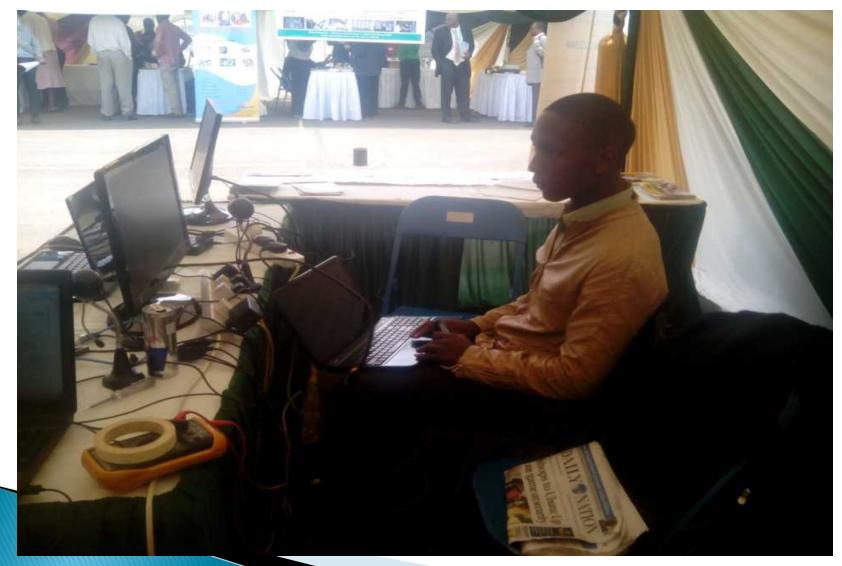


**Crop Stress monitoring** 

#### **Projects and Exhibitions** Machakos CUE exhibition (17<sup>th</sup> – 20<sup>th</sup> March 2015)



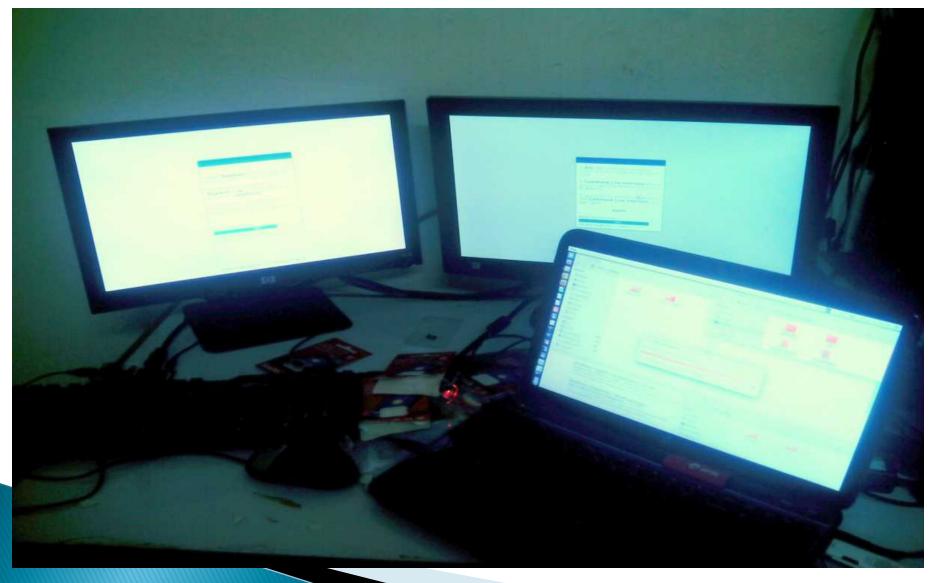
#### **Projects and Exhibitions** Nairobi NACOSTI Exhibition Week (11<sup>th</sup> – 15<sup>th</sup> May 2015)



#### **Projects and Exhibitions** Meru ASK Show (June 2015)

9	Lear	rn with the Raspll	- = ×
Hey There! We are just about to begin learning using the raspberry pi. This will be a very enjoyable activity which you will all like			
Before we continue we have to make sure that the teacher has approved this so enter your name and your teachers name below			
Yc	our Name/ Group name	Teachers Name	
Now whats left is for us to pick a subjectjust click on any one!			
	Mathematics	Science	
	English	Social Studies	
	Kiswahili	Technology	
© Cipher Eletronics 2015			

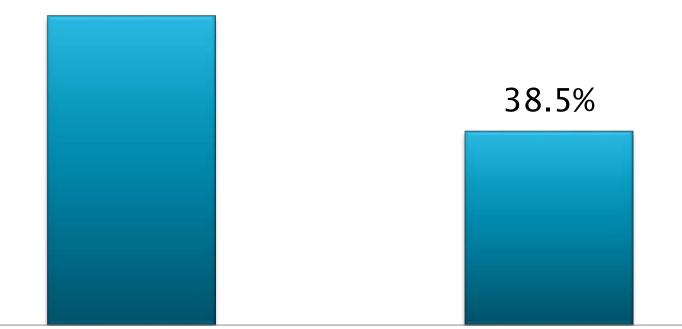
#### **Projects and Exhibitions** Meru Investment Conference (25<sup>th</sup> –27<sup>th</sup> June)



#### Results Students Trained Departments

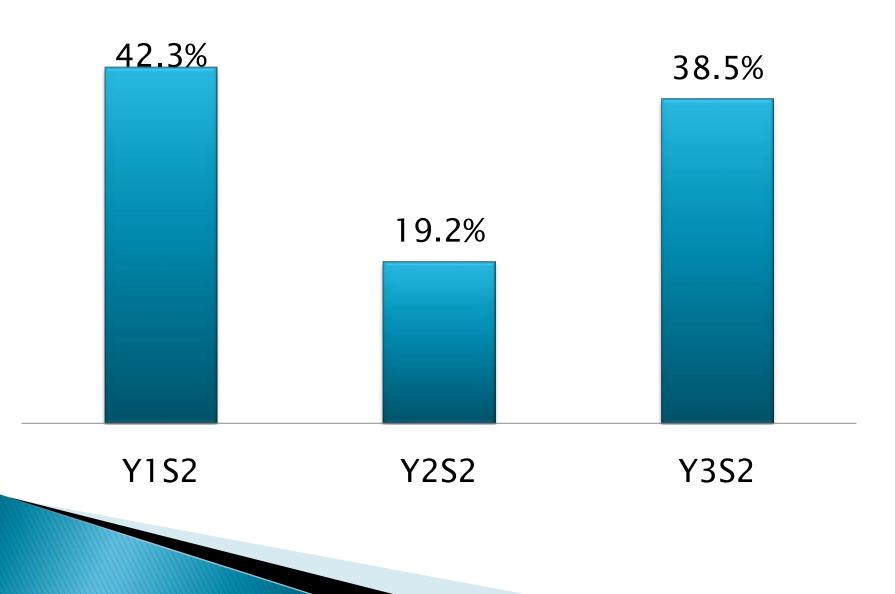
61.5%

IT



#### PHYSICAL SCIENCES

## Year of Study

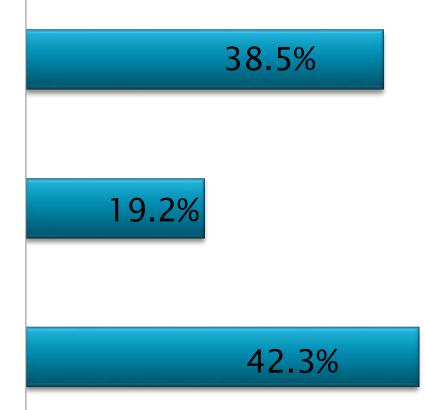


#### Units Taught

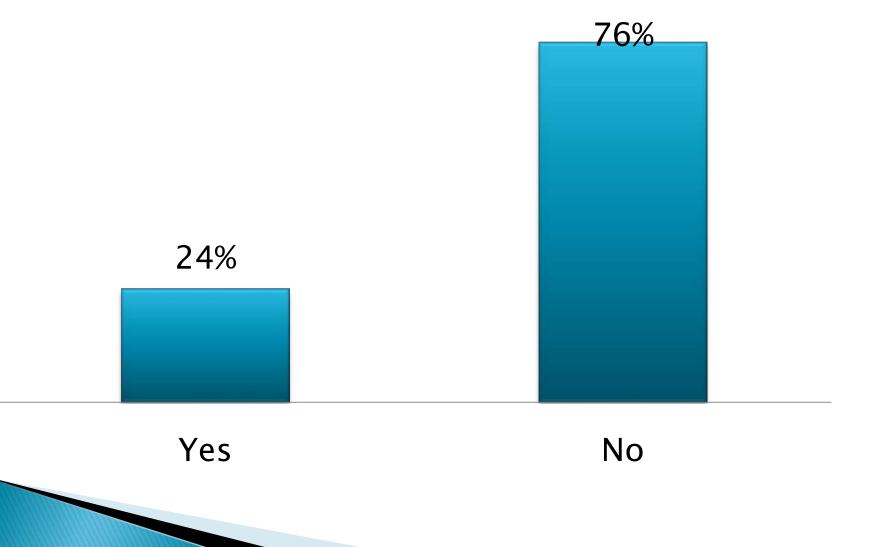
#### **Computational Physics**

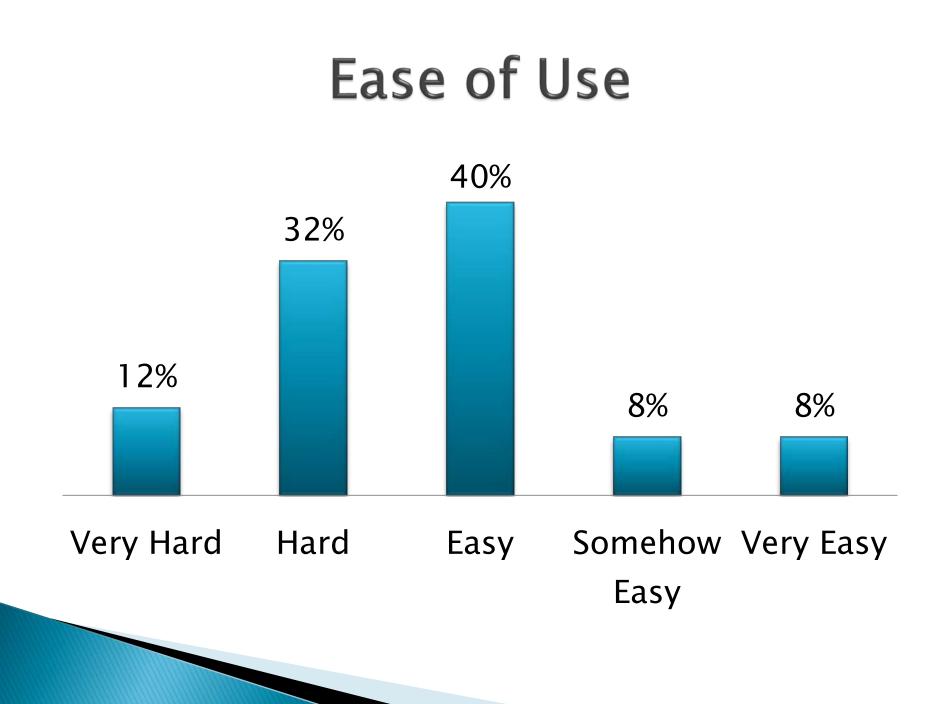
#### Object Oriented Programming II

Fundamental of Computer Programming



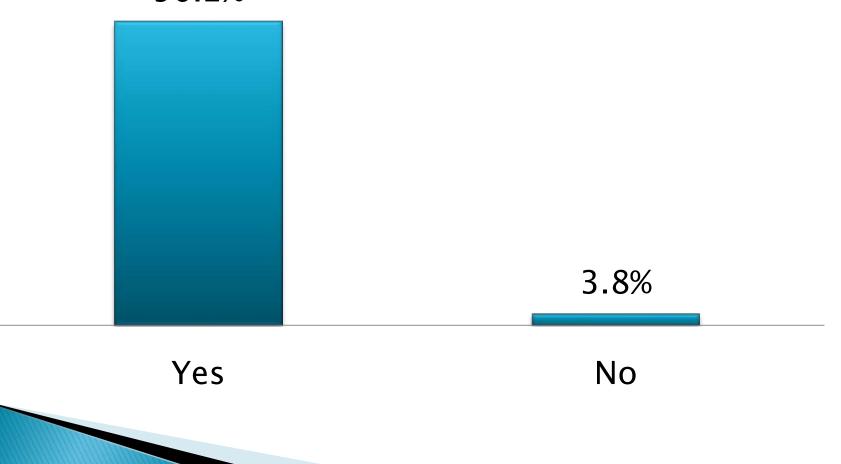
#### Students Feedback Previous Knowledge of RPi





## **Usefulness of RPi**





## **Recommended Year of Study**

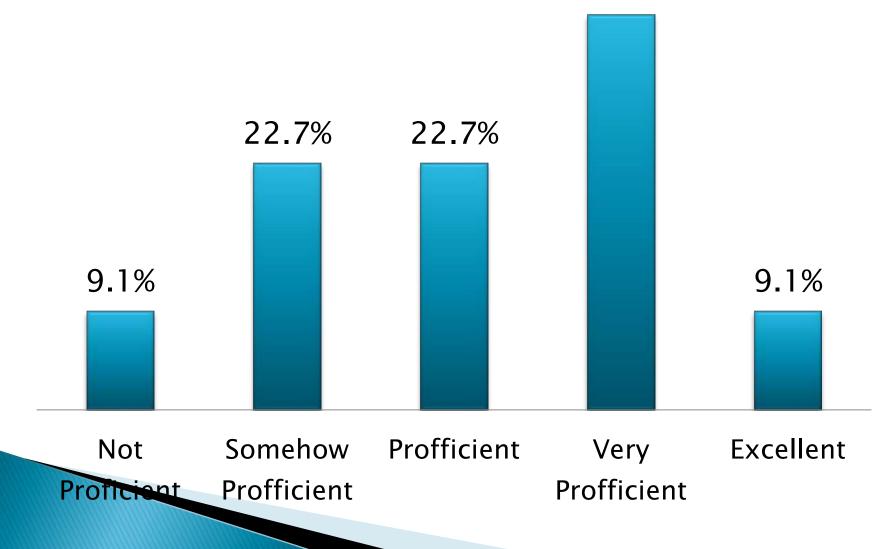




Year 2

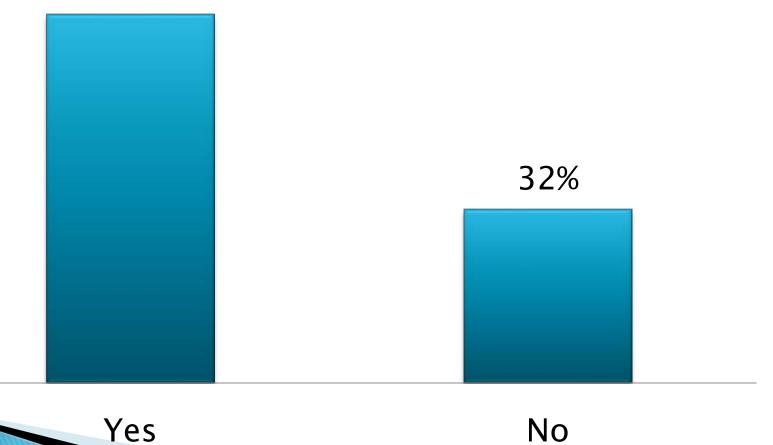
## **Proficiency After Training**

36.4%



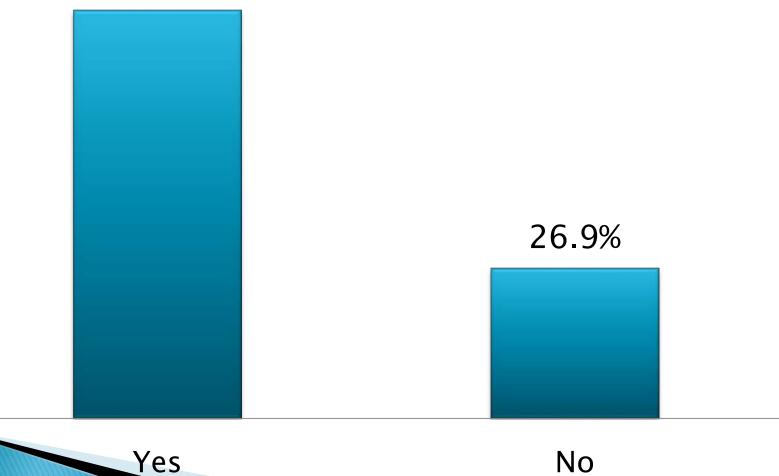
## Use of RPi in Other Units

68%



## Intention to use RPi in Future

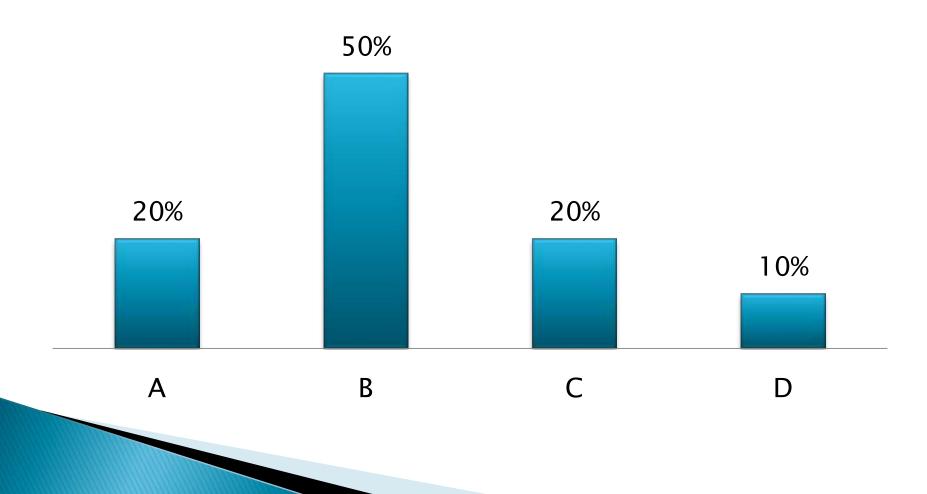
73.1%



# Students' Results after Training **Fundamentals of Computer Programming** 36% 36% 18% 9% R $\boldsymbol{\cap}$ D

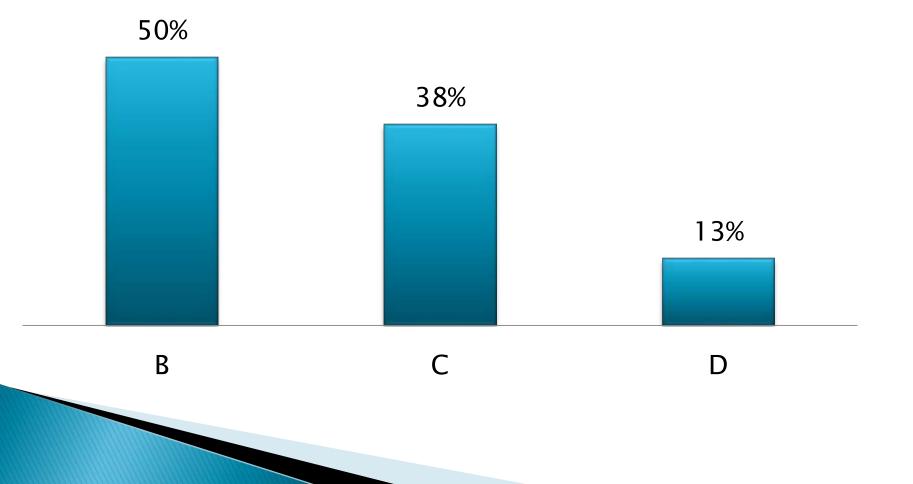
#### Students' Results after Training Cont..

#### **Computational Physics**



#### Students' Results after Training Cont..

#### **Object Oriented Programming II**



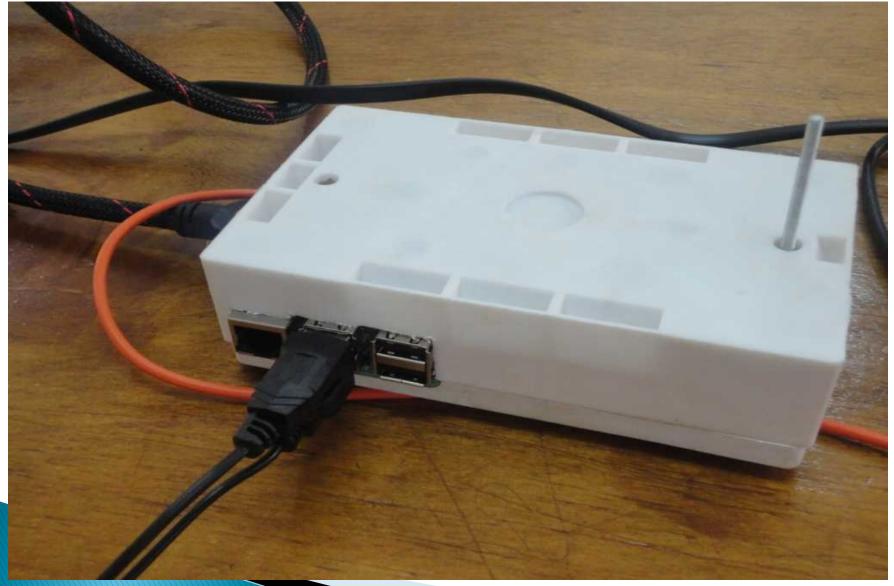
## Students' Challenges

Lack of Understanding 26.9% Slow Processing Speed 19.2% No Challenge 19.2% No Response 15.4% Shortage of Devices 11.5% Slow Internet Access 3.8% Access to RPI after class 3.8%

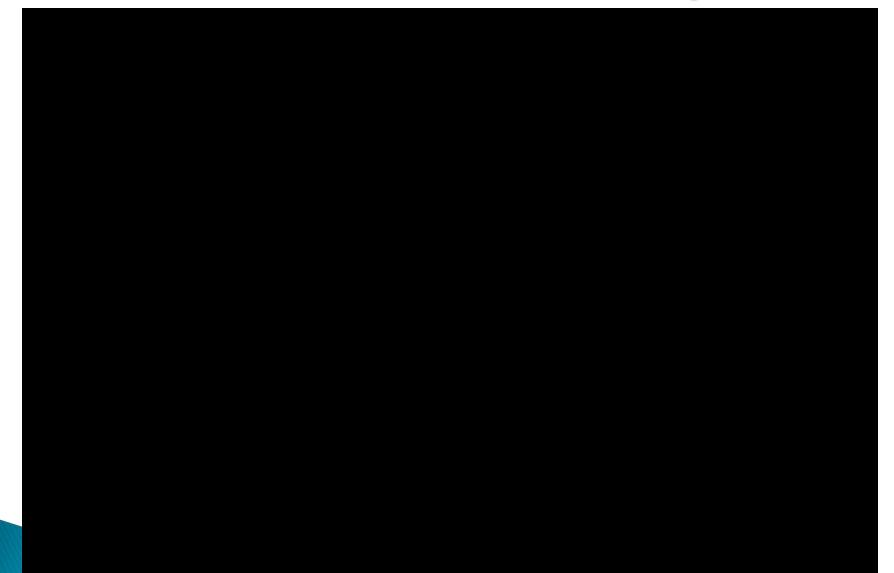
## Implementation Challenges

- 1. Incompatibilities of some accessories
- 2. Lack of a dedicated Lab for RPi project
- Missing Pi casing units and heat sinks

## **Partial Solution**



#### Video documentary



## **Overall Results**

# The team is of the opinion that the project was a success

## Recommendations

- The project be tried in other courses
- Students be encouraged to apply in projects
- Course contents for primary schools be developed

## Thank You

# Q & A