

# CCT

CENTRE FOR  
COMMUNITY  
TECHNOLOGIES



Nelson Mandela  
Metropolitan  
University  
*for tomorrow*



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# Overview of the Center for Community Technologies

**Prof Darelle van Greunen**

**Director Center for Community Technologies**

Nelson Mandela Metropolitan University



The main purpose of the Centre is to promote radical development of the human potential of particularly disadvantaged communities through the use of technologies **across all disciplines**.

- The core activities of the Center include but are not limited to:
  - Technology Research and Development;
  - Training and mentorship;
  - Networking between technology partners and community groups;
  - Policy analysis and policy advice.



Using technology to create communities that work

Health

e-Health

m-Health

Education

Access to resources

Vulnerable women

Access to support structures

Awareness & education

Disability

Policy for HEI in South Africa

Assistive Technologies

Vulnerable youth

Awareness & education

Social youth development

Green energy

Solar and wind energy

Rural development

e-Agriculture

Human Settlements

Food security

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# School Health Screening App

## Partners:

National Department of Science and Technology

National Department of Basic Education

National Department of Health




# HEALTH SCREENER





  
Register new pupil

  
Register new school

  
Edit pupil

  
Edit school

  
Select a pupil to assess

  
Export data

Search Pupil

Search By:

Surname  Grade

Enter: 5

**ASSENT FORM**

Did the pupil provide a signed parental consent form:  Yes  No

**STRICTLY CONFIDENTIAL**  
**LEARNER ASSENT TO PARTICIPATE IN THE INTERGRATED SCHOOL HEALTH PROGRAMME**

I Lucas Podolsky, aged 16 years, hereby assent/do not assent to participate in the Integrated School Health Programme. I understand that the participation in the Integrated School Health Programme is voluntarily and that I may choose to undergo all or some of the screening tests.  
I further inform the school that I am currently receiving treatment/medication for (e.g. Asthma, Diabetes etc).

**I accept** **I decline**

Oral Health

Currently quizzing: Lucas Podolsky

### Oral health Question

- 1) Tooth decay  
 Yes  
 No
- 2) Bleeding gums  
 Yes  
 No
- 3) Gingivitis  
 Yes  
 No
- 4) Inflammation of the gums  
 Yes  
 No
- 5) Oral thrush  
 Yes  
 No
- 6) Mouth sores  
 Yes  
 No
- 7) Cleft palate  
 Yes  
 No
- 8) Other abnormalities  
 Yes  
 No

**Referral**

Referral:  Yes  No

If yes, to where: \_\_\_\_\_

Date of referral (d/m/yyyy): 01/01/2014

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# Mobile Hearing Screening App

Collaboration with University of  
Pretoria, Department of Audiology





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# Mobile Registration Device

Finalist in SAB Innovation  
Competition

Potential partners: DST and MRC



## Beneficiaries

- 21 m people geographically challenged
- Aging population
- Vulnerable groups dependent on social grants and public healthcare



## Progress to date:

- Solar-powered tablet developed and approved by SABS and ICASA.
- App prototype evaluated by users.
- App ready to go live for first trials within 6 weeks.





• • SAMSUNG

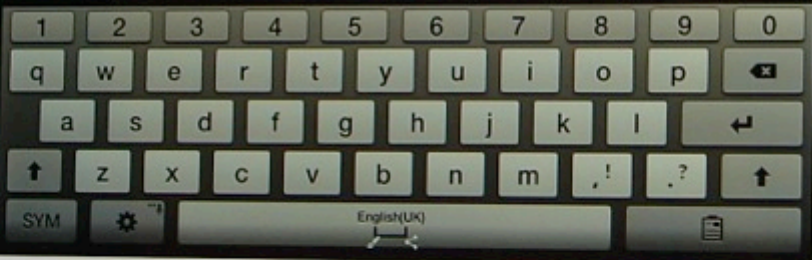
12:47

My Print

Address - number	-
Address - street	
Suburb	
City	
Postal code	
Telephone (h)	
Telephone (w)	
Cell phone	

Back

Next










• • SAMSUNG

12:47

My Print

Left

Right

- Thumb  ✓
- Finger 1
- Finger 2
- Finger 3
- Finger 4

- Thumb
- Finger 1
- Finger 2
- Finger 3
- Finger 4



Back

Accept

Next





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# Mobile App to support Maths

Partners:

University of Pretoria, DBE and DoE,  
Schools in Eastern Cape

Get R1000\* off when you open a DionWired account [Apply now!](#)


help you. You will be linked up in a moment.

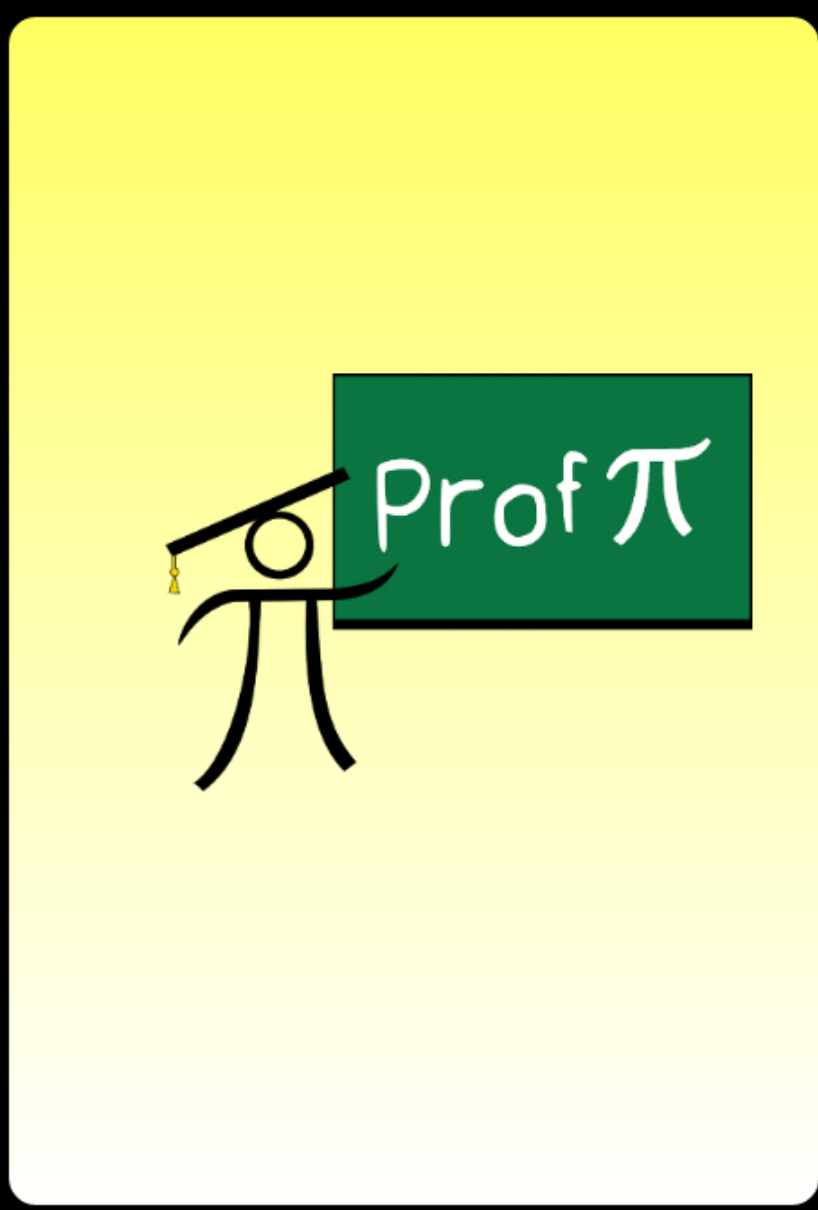
Prof  $\pi$ : You have been linked with somebody to help you. All conversations are recorded for security, quality, and research purposes.

Prof  $\pi$ : how can i help with math today

laurie pi: trig pls

Prof  $\pi$ : sure what is your problem

type in your message 



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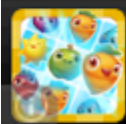
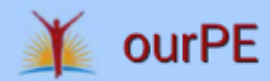
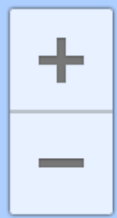
# **My City – Tourism App**

Nelson Mandela Bay Tourism





Shell oils & greases are designed to help you reduce operating costs



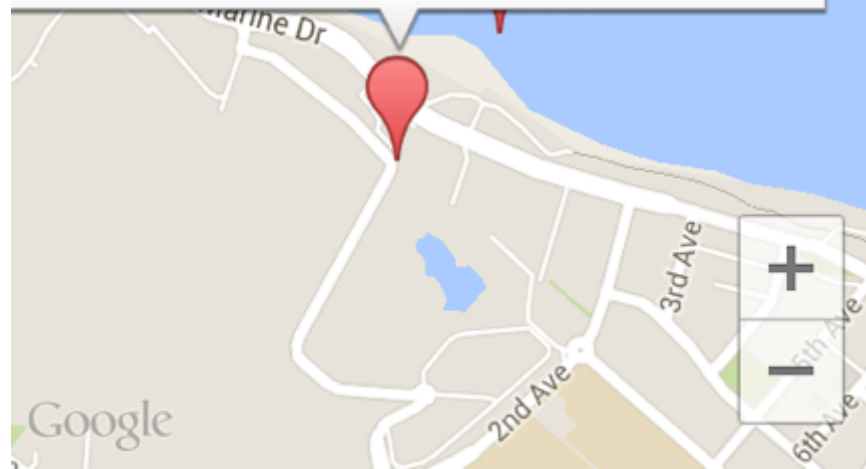
Farm Heroes Saga  
FREE ★★★★★ 2731730 Reviews



boardwalk



Click...



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## E-Agriculture

Mobile Monitoring of Hydroponic  
Farms in collaboration with Fraunhofer  
Research Institute in Portugal



Select a zone

<p>A</p> <p>Cucumber</p>  	<p>B</p> <p>Green Pepper</p> 
<p>C</p> <p>Tomatoes</p> 	<p>+</p> <p>Add Zone</p>



Configure Tunnel

Temperature : 29°C

Humidity : 90% RH




Water receive in the bag : 500ml

Water out of the bag: 300ml

pH : 5.5

Electrical Conductivity (EC) : 2.3  $\mu$ s

# Greenhouse 1

 Temperature (C)	 Humidity (% RH)	 Water level (ml)	 pH	 Elec Conduc. (s/cm)
Max <input type="text" value="28"/>	Max <input type="text" value="80"/>	Max <input type="text" value="400"/>	Max <input type="text" value="5"/>	Max <input type="text" value="3"/>
Min <input type="text" value="28"/>	Min <input type="text" value="50"/>	Min <input type="text" value="256"/>	Min <input type="text" value="405"/>	Min <input type="text" value="2.75"/>

28.02

▲	▲
29	01
28	02
27	03
▼	▼

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## Contact details

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