

# *Digital Open Textbooks for Development: Broadening access and supporting curriculum transformation at UCT*

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Centre for Innovation in Learning and Teaching

University of Cape Town





*Teaching & Learning*  
**CONFERENCE**

**17 July 2018**  
**8:00 – 17:00**



Centre for  
Innovation in  
Learning and  
Teaching



Context: The struggle for access  
and social inclusion



Fees must fall, Picture by Ian Barbour; Wikimedia, CC BY-NC-SA  
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20/21 October, 2018

# LEARNING REIMAGINED

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DECOLONISATION IN  
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resist&  
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**DIALOGUING &  
LIVING WELL  
TOGETHER**

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NOVEMBER 8-10, 2018

**Decolonization and Insurgent  
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# Curriculum change in South African higher education

What Knowledge? Whose  
Knowledge?

Representativity

Exclusion and inclusion

Gaps, silences and absences

Invisibility

Marginalisation

Intersectionality

Positionality

## **Potential of open education**

### **# feesmustfall**

Economic dimension

### **# Rhodesmustfall**

Cultural dimension

# Affordances of the open movement

open

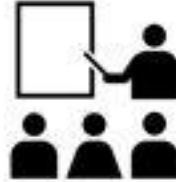
## The Open Ecosystem



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Data



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## <UCT IP Policy: key copyright provisions>

### Sec 8.1: UCT holds copyright in, e.g.:

Multiple choice tests and examination answers  
Syllabuses & Curricula  
Computer software developed at UCT  
UCT publications (Monday paper, websites etc)



### Sec 8.2 & 8.3: UCT assigns copyright to author for, e.g.:

**Scholarly publications**

Art, music, films

Course materials (but UCT retains perpetual licence)

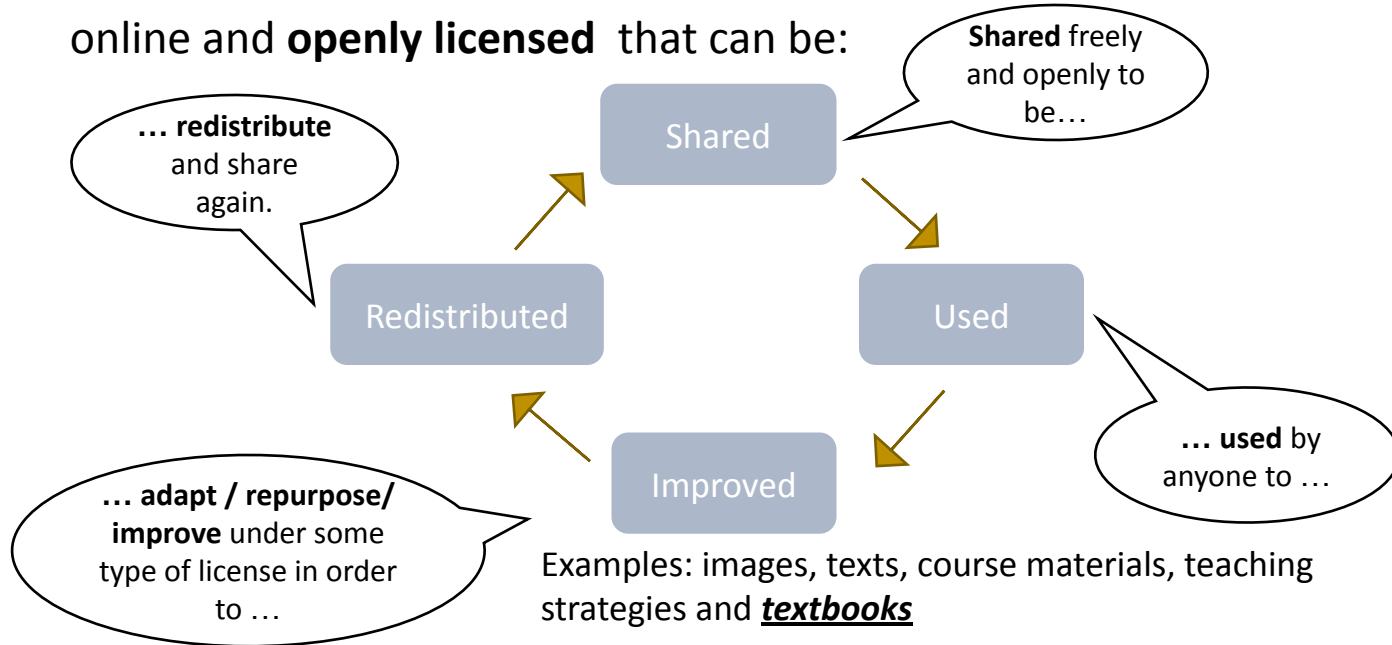
Student theses (subject to licence)

**“UCT supports the publication of materials under Creative Commons licences to promote the sharing of knowledge and the creation of Open Educational Resources.”**

(sec 9.2)

# Open Educational Resources

**Open content / Open educational resources (OER) / Open Courseware** are educational materials which are **discoverable** online and **openly licensed** that can be:



OER have the potential to address two key areas of concern in Global South context...

1. Cultural inequality and misrepresentation, as **localisation** made possible by adaptation affordances of open licensing.
2. Economic injustice of access/cost barrier, as resources are typically **free to the user**.

# Key value propositions of **open educational practices**

- Conceptualise **alternative epistemic views** on educational issues and curricula.
- Create OER collaboratively with colleagues or **co-create with students**.
- Circulate or share these OER with other colleagues or students.
- Open these up for critique by others so that they can be quality assured and possibly recognised for formal certification.

# Open textbooks

# Relative expense: the cost of textbooks

UCT International Academic Programmes Office estimates cost of textbooks and stationery as **R 7 000 per semester**

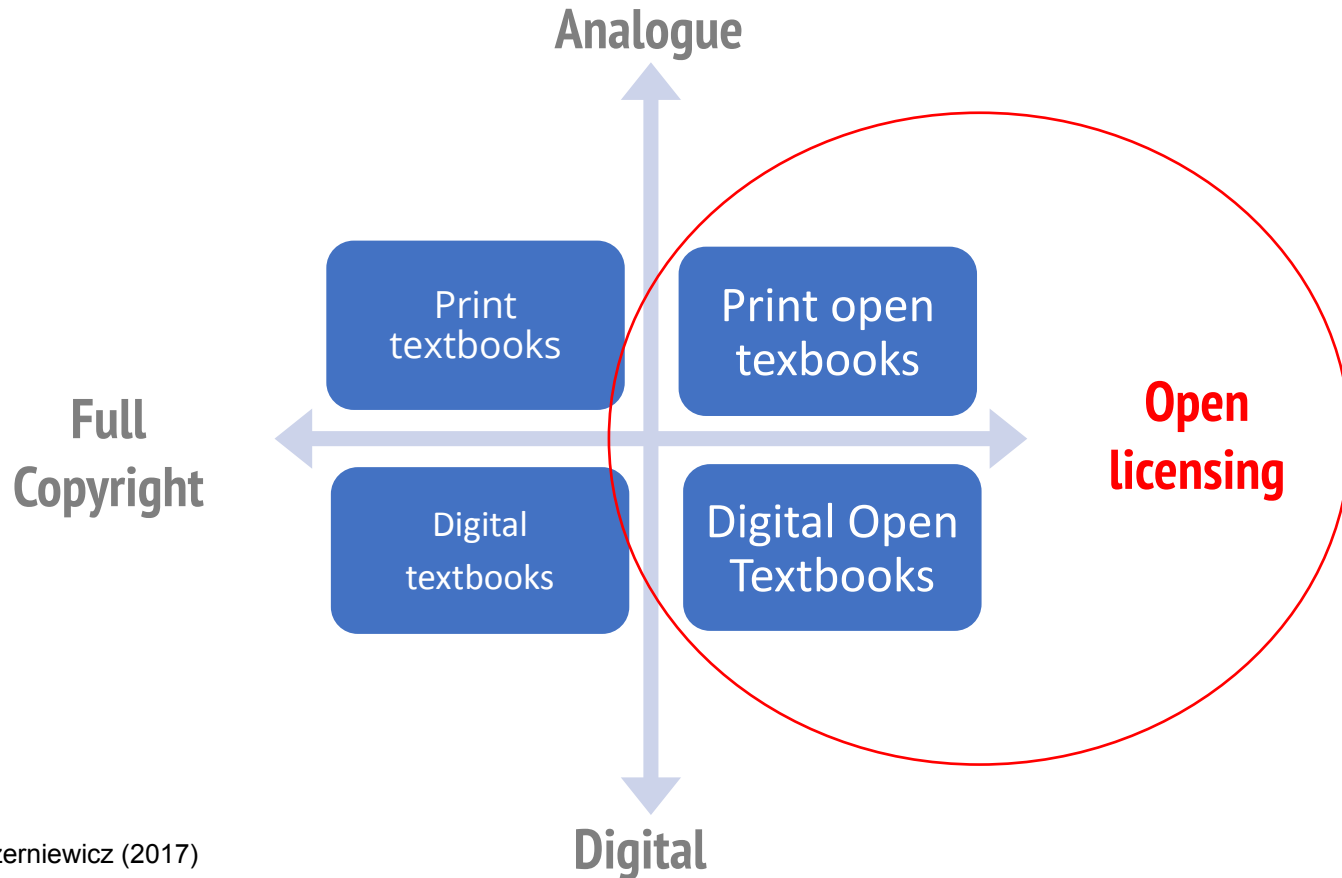
> 10.05% of average black household annual household income (21% / annum)

> 5.85% of average South African annual household income (11.7% / annum)

**Table 4: Comparison of average annual household income by sex and population group of household head**

|   | IES 2010/11<br>(R) | IES 2005/06<br>(R) | Real Growth | Increase in<br>Rand terms |
|---|--------------------|--------------------|-------------|---------------------------|
| South Africa                              | 119 542            | 102 401            | 16.7%       | 17 141                    |
| <b>Sex of household head</b>              |                    |                    |             |                           |
| Male                                      | 151 186            | 127 914            | 18.2%       | 23 272                    |
| Female                                    | 70 830             | 62 397             | 13.5%       | 8 433                     |
| <b>Population group of household head</b> |                    |                    |             |                           |
| Black African                             | 69 632             | 51 773             | 34.5%       | 17 859                    |
| Coloured                                  | 139 190            | 109 038            | 27.7%       | 30 152                    |
| Indian/Asian                              | 252 724            | 184 711            | 36.8%       | 68 013                    |
| White                                     | 387 011            | 385 599            | 0.4%        | 1 412                     |

# Models of textbook provision



A form of copyright provision where permissions for use are granted up front

Materials are usually free to the user, or have a minimal cost

# What are open textbooks?

- Openly licensed materials (usually digital).
- Published in formats that facilitate integration of multimedia.
- Comprised of multiple granular elements, which can be remixed or translated from other content collections (and be integrated into other content collections).
- Allow for legal hosting on repositories/websites, printing and redistribution.

Open textbooks provide academics with a means to build on openly published materials produced in other parts of the world (particularly when using platforms that are designed with this affordance in mind), while integrating a more localised approach in terms of the examples used as well as the assessment activities.

# Where can you find existing open textbooks?



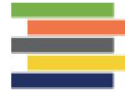
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in Europe have used an  
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**250 institutions**  
in Asia have used an  
OpenStax textbook

Open textbooks used and reused anywhere

Open textbooks at UCT

Open Access Atlas of  
Otolaryngology  
Head & Neck Operative Surgery



# Early adopters sharing teaching materials...

***Open Access Atlas of Otolaryngology Head & Neck Operative Surgery***  
by Johan Fagan

1 download every 90 seconds

85 chapters

Multiple authors

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# eMarketing

The essential guide to  
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4<sup>th</sup> Edition



# The Land Question in South Africa

The Challenge of  
Transformation  
and Redistribution

Edited by Lungisile Ntsebeza and Ruth Hall

# DISCOVERING INFORMATION SYSTEMS



... and cutting textbook costs.

Open textbook use and adaptation at UCT

The screenshot shows the OpenStax CNX website interface. At the top, there is a navigation bar with the OpenStax CNX logo, a search bar, and links for 'About Us' and 'Give'. The main heading is 'Preface to College Physics for PHY1032 at UCT', with a sub-heading 'Derived from Preface by OpenStax'. On the right side, there is a 'Page by: Sahal Yacoub' credit and social media icons for Facebook, Twitter, Google+, and LinkedIn. Below the heading, there is a 'Books' dropdown menu. The main content area is divided into two columns. The left column contains a list of books, with 'College Physics for PHY1032 at UCT' selected, showing its authors (Sahal Yacoub), revision date (Apr 3, 2018), and a 'Go to Book' link. The right column contains the preface text, which states that the textbook was derived from sections of 'College Physics', an OpenStax resource, tailored for the University of Cape Town's first-year Physics course. It also includes a section titled 'About College Physics for PHY1032 at UCT' and a list of sections: 'Coverage and Scope' and 'This collection includes the following sections: Chapter 1: Geometric Optics' and 'Chapter 2: Vision and Optical Instruments'.

UNIVERSITY OF CAPE TOWN: DEPARTMENT OF PHYSICS  
PHY1032F: GENERAL PHYSICS B (2018)

|                            |   |
|----------------------------|---|
| <b>Description</b>         | PHY1032F is an algebra-based introductory course for Science students who do not intend proceeding to second-year courses in Physics. Some calculus may be used.  |
| <b>Lecturers</b>           | <b>Prof. David Wolfe:</b> dwolfe@unm.edu / RW James 4.T6<br><b>Dr Trisha Salagaram (convenor):</b> trisha.salagaram@uct.ac.za/ RW James 5.13<br><b>Prof. André Peshier:</b> andre.peshier@uct.ac.za / RW James 4.12 |
| <b>Course Tutor</b>        | Alexes Mes: msxale002@myuct.ac.za<br>The course tutor is available for 2 hours of consultation per week on <b>Thursdays between 14h00 and 16h00.</b>  |
| <b>Prerequisite</b>        | PHY1023H or PHY1031F passed   |
| <b>Prescribed Textbook</b> | College Physics (Openstax). A copy of the textbook is available on the Vula page under Resources/Textbook.  |

# Digital Open Textbooks for Development (DOT4D) at UCT



**Digital Open Textbooks for Development**



Centre for  
Innovation in  
Learning and  
Teaching



- **Funder:** Canada's International Development Research Centre (IDRC)
- **Period:** July 2018 to December 2020
- **Host institution:** CILT, UCT
- **Context:** UCT, South Africa

## Project general objective:

**To contribute to improving inclusion in South African higher education by addressing equitable access to appropriate and relevant learning resources.**

## Project specific objectives:

Articulate and identify the best approaches to designing an open textbook.

Support open textbook publishing activity at UCT that prioritizes strategies for integrating student perspective, curriculum transformation, and sustainability.

Inform current textbook publishing policy-development initiatives at institutional and national levels.

## Activity 1: Case studies

4 in depth case studies (purposive-different approaches)

## Activity 2: DOT grants

Grant allocation- at least 7 grants of up to R55 000 (considering gender, discipline, transformation, collaboration, student co-creation)

## Activity 3: Impact events

Series of engagements with stakeholders regionally and nationally

Open to: include student voices

Open to: include marginalised voices

Open to: create new knowledge that is  
transformative, representative and  
localised

# DOT4D call for grants

Launching call in September 2018

Send expressions of interest to <[glenda.cox@uct.ac.za](mailto:glenda.cox@uct.ac.za)>



# References

Hodgkinson-Williams, C. (2018). Challenges of online learning for campus-based universities: Open educational practices and resources as responses. International Conference on e-Learning, 5 July 2018. Retrieved from file:///C:/Users/01418082/Downloads/icel2018challengesofonlinelearningforcampus-baseduniversitiesopeneducationalpracticesandresourcesasa-180706083021.pdf

Thanks to Laura Czerniewicz for the use of her slides: [laura.czerniewicz@uct.ac.za](mailto:laura.czerniewicz@uct.ac.za)

