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Digital Open Textbooks for Development: Collaborative, sustainable models for transformation and student involvement

By Glenda Cox & Michelle Willmers
Centre for Innovation in Learning and Teaching,
University of Cape Town
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Centre for Innovation in Learning and Teaching

GO GN GLOBAL OER GRADUATE NETWORK

DOT4D
Digital Open Textbooks for Development

UNESCO CHAIR IN OPEN EDUCATION AND SOCIAL JUSTICE

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Digital Open Textbooks for Development

Initiated as a three-year (2018–2021) research, advocacy and implementation project funded by the Canadian IDRC, following in wake of Research on Open Educational Resources for Development (ROER4D) and other CILT open education initiatives (since 2007). Now an institutionally funded initiative.

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Principal Investigator

Bianca Masuku
Researcher

Michelle Willmers
Publishing &
Implementation Manager

Why Open Education matters

> There is a need for **accessible** and **FREE** resources

> There is a need for **localised** materials, transforming the curriculum and addressing relevance **created collaboratively**

> Lecturers can re-use materials (more efficient use of time)

> Open education encourages lecturers to reconsider their teaching and learning approaches

> Colleagues and students can become co-creators

Widening structural inequality

> The high cost of textbooks is not only detrimental to students economically but is also a social justice issue.

> In both the US and in other countries (e.g. Canada and New Zealand) it has been observed that **“those most economically harmed by the COVID-19 pandemic were populations already frequently considered disenfranchised”** (Williams & Worth 2020)

> The authors call for **“intentional disruption on the part of the institution”**

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The rise of student-centred approaches to teaching and learning

Students as co-creators of teaching approaches, course design, and curricula: Implications for academic developers

Article *in* International Journal for Academic Development · June 2011

DOI: 10.1080/1360144X.2011.568690

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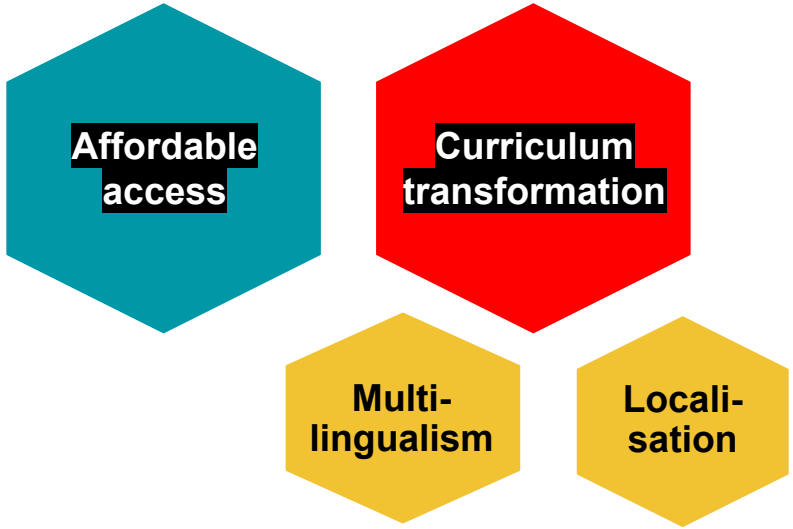
Social justice drivers for open textbook production at UCT



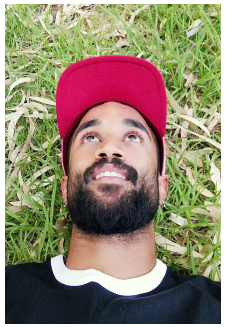
Key features of open textbooks for social justice

- Digital, freely available collections of scaffolded teaching and learning content
- published under an open licence
- with affordances for integrated multimedia and third-party content
- published via platforms and in formats that provide affordances for content delivery on a range of devices, print and low bandwidth access strategies

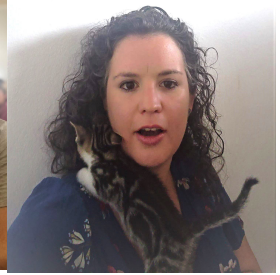
- through **collaborative, inclusive authorship, quality assurance and publishing approaches**
- that can be leveraged in **sustainable models of open textbook production for social justice and transformation**.

Parity of Participation > Collaboration > Inclusion > Social justice > Sustainability

UCT open textbook authors in the DOT4D study



Kensleyrao Apajee
Mechanical Engineering



Chris Barnett & Cesarina Edmonds-Smith
Chemistry

Stella Papanicolaou
Architecture

Dr Juan Klopper
Surgery

A/Prof. Abimbola Windapo
Construction

A/Prof Maria Keet,
Computer Science

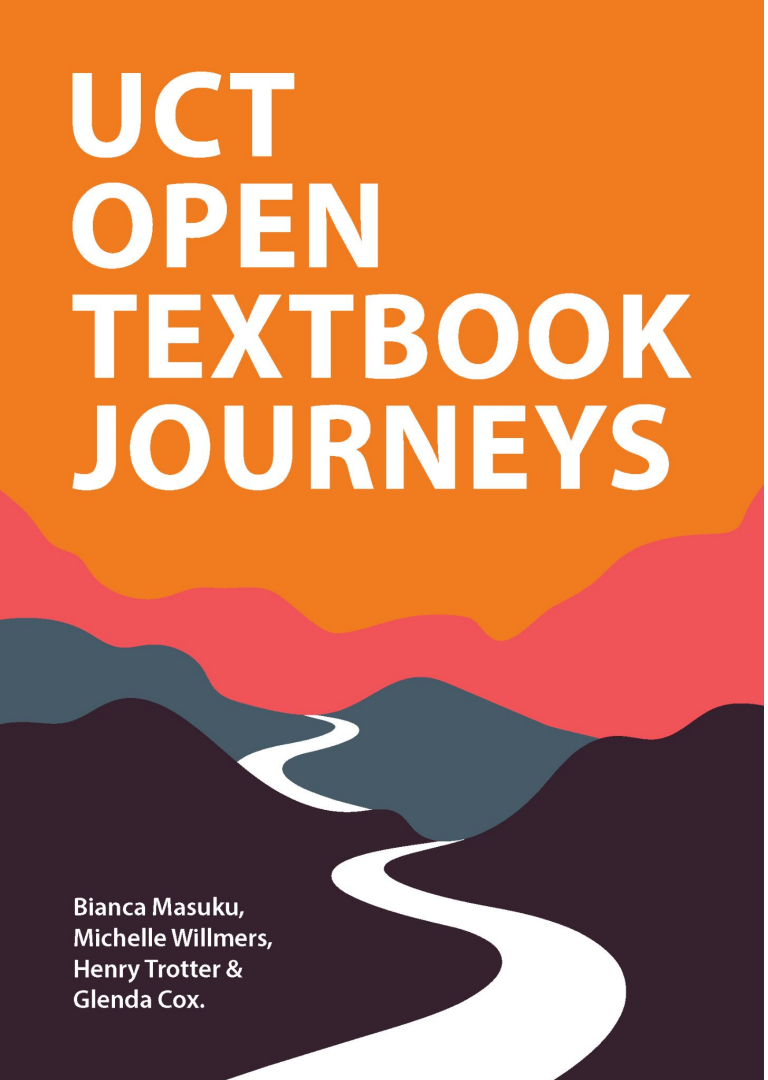
Jonathan Shock,
Mathematics

Dr James Lappeman,
Marketing

Tim Low,
Statistics

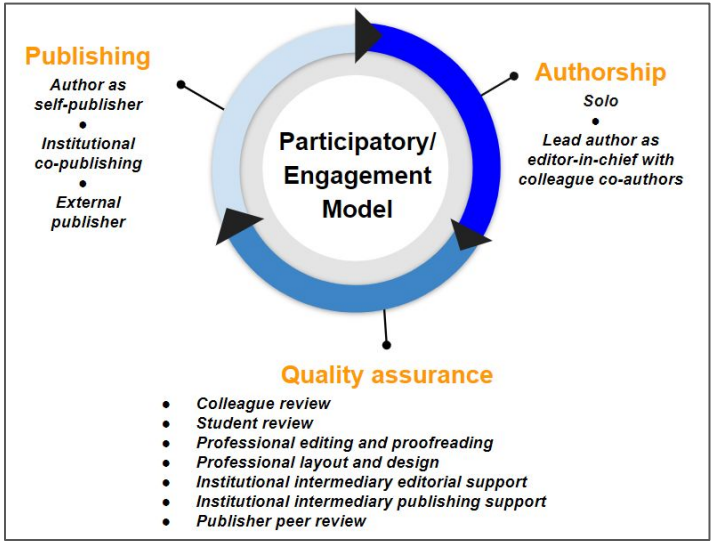
Dr Michael Held,
Orthopaedic Surgery

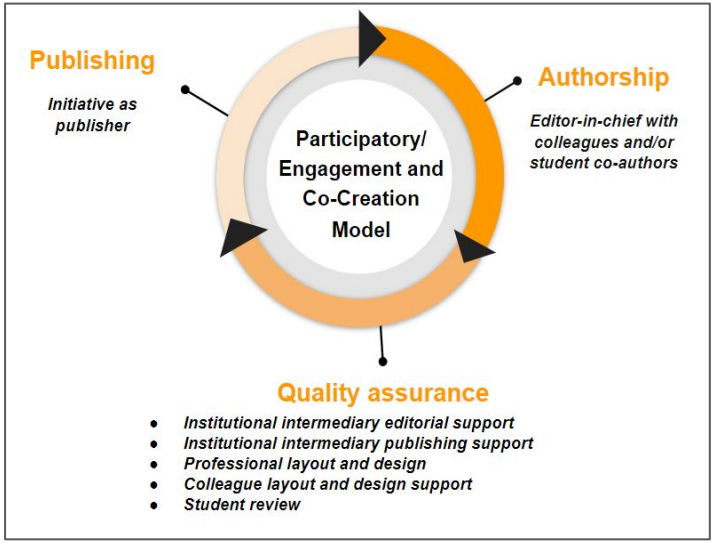
Dr Claire Blackman
Mathematics

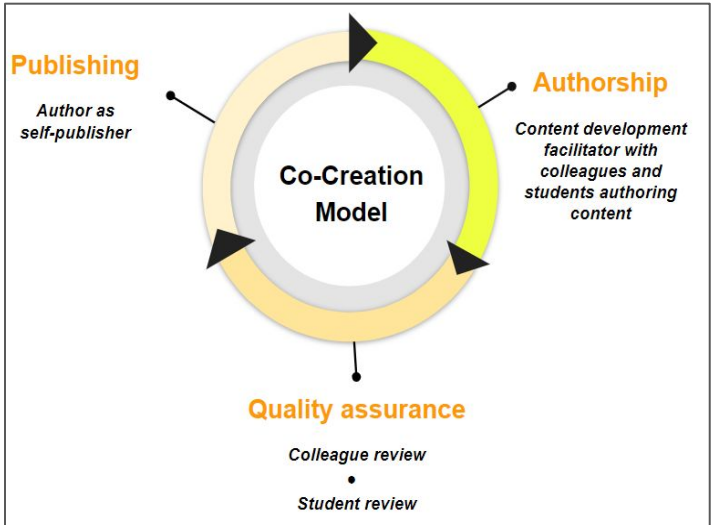


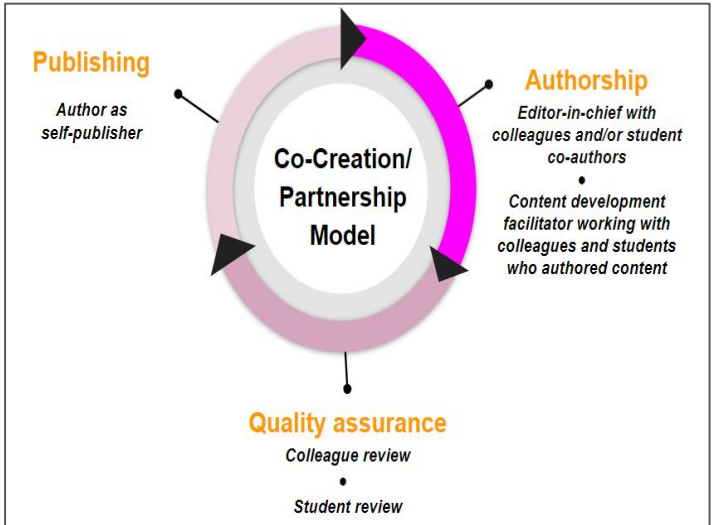
Read about the journeys these academics went on in developing their open textbooks; including their motivations, challenges, insights around working with students and sustainability factors.

https://openbooks.uct.ac.za/uct/catalog/book/37


Publishing
Author as self-publisher
•
Institutional co-publishing
•
External publisher
Participatory/ Engagement Model
Authorship
Solo
•
Lead author as editor-in-chief with colleague co-authors
Quality assurance
Colleague review
Student review
Professional editing and proofreading
Professional layout and design
Institutional intermediary editorial support
Institutional intermediary publishing support
Publisher peer review


Publishing
Initiative as publisher
Participatory/ Engagement and Co-Creation Model
Authorship
Editor-in-chief with colleagues and/or student co-authors
Quality assurance
Institutional intermediary editorial support
Institutional intermediary publishing support
Professional layout and design
Colleague layout and design support
Student review


Publishing
Author as self-publisher
Co-Creation Model
Authorship
Content development facilitator with colleagues and students authoring content
Quality assurance
Colleague review
•
Student review


Publishing
Author as self-publisher
Co-Creation/ Partnership Model
Authorship
Editor-in-chief with colleagues and/or student co-authors
•
Content development facilitator working with colleagues and students who authored content
Quality assurance
Colleague review
•
Student review

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Student co-creation highlights (and lowlights)

- In 6 initiatives, students took on various co-creation roles in authorship.
- In 2 initiatives, students were co-creators in quality assurance processes.
- Authors found ways in which to not only capture students' lived realities in the authorship process, but also to include their feedback in quality assurance.
- However, students were not involved in any of the publishing processes.
- Student participation is a critical aspect of the institutional transformation agenda, in that it addresses social justice and inequity in the classroom.

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Quality assurance approaches used in DOT4D publishing processes

PRIOR TO THE COURSE

- Delphi consensus study

IN THE COURSE

- Colleague review
- Student review
- Supervisor review

IN PRODUCTION

- Professional resource design and production
- Institutional intermediary editorial support
- Institutional intermediary publishing support
- Professional editing and proofreading
- Professional layout and graphic design
- Colleague layout and graphic design
- Peer review
  * Community focused
  * Formal internally managed with publisher
  * Formal externally managed by publisher

Addressing recognition and sustainability:
The UCT Open Textbook Award

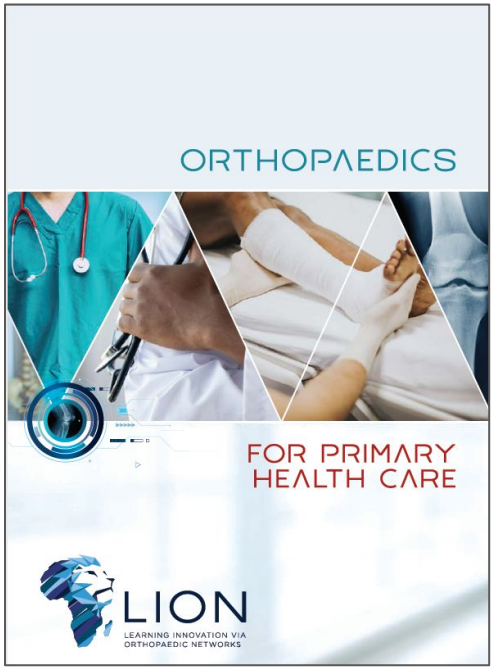
Recognising teaching innovation that promotes social justice and transformation

Symbol of institutional commitment to supporting teaching and learning initiatives producing textbook content that promotes:

- Curriculum transformation / decolonisation
- Pedagogical innovation
- Inclusion of students and marginalised voices
- Disability access
- Relevance to local context
- Multilingualism
- Technical innovation

Award winners

2021



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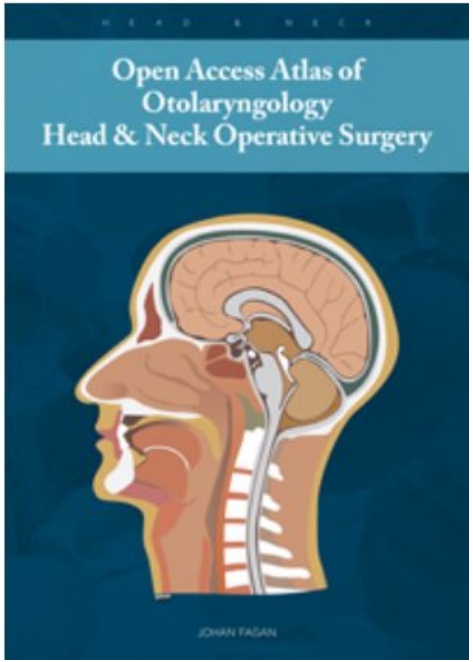

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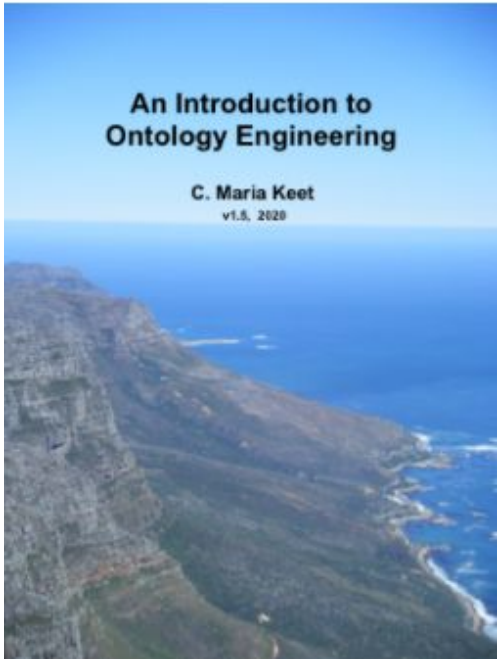
2022



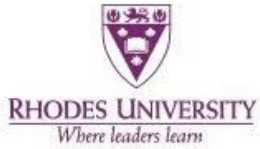
https://people.cs.uct.ac.za/~mkeet/OEbook/

What’s next for open textbooks at UCT and beyond?

Image: Wikimedia Commons (CC BY)

The student experience

‘Students as partners’ in open textbook production: Power, identity and the reconceptualisation of content and practice



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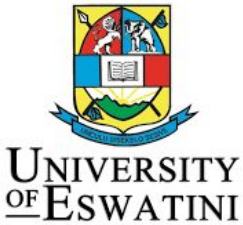

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