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Open textbook authorship, quality assurance and publishing: Social justice models of participatory design, engagement, co-creation and partnership

By Glenda Cox, Bianca Masuku & Michelle Willmers

Digital Open Textbooks for Development, 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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Anne Algers

(24 April 1961 –
2 March 2022)

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.

Dr Glenda Cox
Principal Investigator

Bianca Masuku
Researcher

Michelle Willmers
Publishing & Implementation Manager

DOT4D objective

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

> Backdrop of widening equity, exacerbating crisis in access and representation

JOURNAL OF INTERACTIVE MEDIA IN EDUCATION

A Case Study in Mitigating COVID-19 Inequities through Free Textbook Implementation in the U.S.

SPECIAL COLLECTION: LEARNING FROM LOCKDOWN

ARTICLE

KATHERINE WILLIAMS

ERIC WERTH

*Author affiliations can be found in the back matter of this article

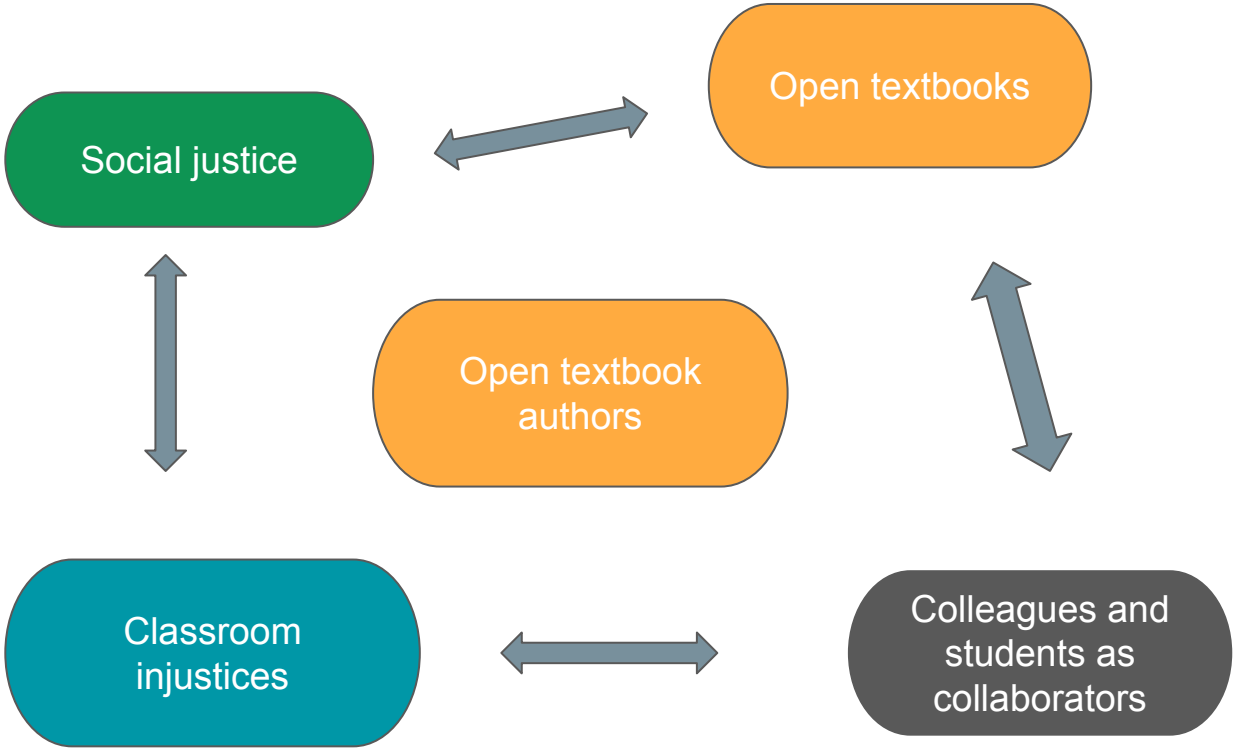
]u[ubiquity press

Key features of open textbooks for social justice

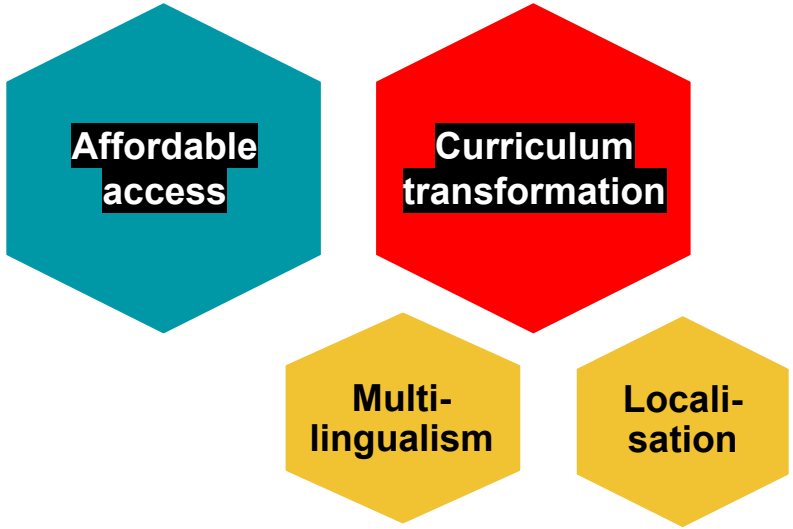
- Digital, freely available collections of scaffolded teaching and learning content
- published under an open licence
- with affordances for integrated multimedia and third-party content
- published via platforms and in formats that provide affordances for content delivery on a range of devices, print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


Social justice
Open textbooks
Open textbook authors
Classroom injustices
Colleagues and students as collaborators

Social justice drivers for open textbook production at UCT



Unpacking social justice

Social justice is a concept that requires the organisation of social arrangements that make it possible for **everyone to participate equally in society**.

Fraser (2005) considers social justice as "**participatory parity**' in **economic**, **cultural** and **political** dimension

(Cox, Masuku & Willmers, 2020)

https://commons.wikimedia.org/wiki/File:Social_Justice_Pride_Flag.png

Social Justice as participatory parity (Fraser)

Economic

- Material resources
- Maldistribution and redistribution

Cultural

- Cultural attributes
- Misrecognition and recognition

Political

- Political voice
- Mis/representation mis/framing

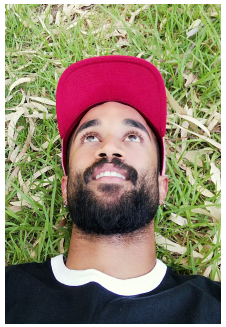
> **Participatory parity looks at the *what*, *who* and *how* of social justice**

> Justice in each dimension can be remedied through **affirmative** or **transformative** responses.

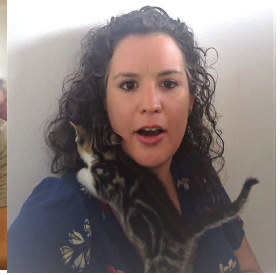
(Thanks to Susan Gredley)

Method and collaboration framework

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

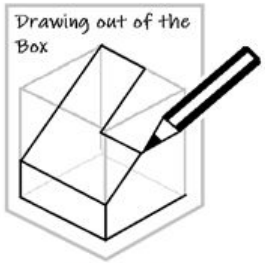
Tim Low,
Statistics

Dr Michael Held,
Orthopaedic Surgery

Dr Claire Blackman
Mathematics

DOT4D grantees

Engineering and the Built Environment



First-Year Mechanical Engineering Drawing

AMoMo
Architecture of the Modern Movement in the Global South
.gs+

Science

Computer Science

Mathematics Textbooks for South Africa

Ingxoxo

First-year Chemistry in South African context

Health Sciences

Division of Orthopaedic Surgery
University of Cape Town

Learning Innovation through Orthopaedic Network

THE OPEN SURGERY TEXTBOOK

Centre for Higher Education Development

Statistics: Introduction to Probability in isiXhosa

Commerce

http://www.dot4d.uct.ac.za/dot4d-grantees

Method

Examine how 11 UCT open textbook initiatives (through grants programme) transform content (co-)creation and pursue social justice (Fraser, 2005) within their classroom contexts through the development of open textbooks

- DOT4D mixed-method approach: grant proposals, surveys, case study interviews, grant closure reports and fieldnotes
    - Identified key production activities within their processes (authorship, quality assurance and publishing) and defined different forms of collaborative approaches with colleagues and students therein.
- Focused on collaborative approaches with colleagues and students: **Which open textbook production activities were colleagues and students involved in and how / to what degree were they being brought into these processes?**
    - Utilised Bovill (2020) framework of inclusion as analytical tool to understand degrees of collaboration and student involvement in open textbook production.
    - Mapped production activities to inclusion strategies to identify collaborative open textbook production models.

Method

11 UCT open textbook initiatives > content (co-)creation > social justice (Fraser, 2005) > classroom contexts > open textbooks development

DOT4D mixed-method approach

Identified key production activities (authorship, quality assurance and publishing)

Defined different forms of collaborative approaches with colleagues and students

Main focus: **Which open textbook production activities were colleagues and students involved in and how / to what degree were they being brought into these processes?**

Utilised Bovill (2020) framework of inclusion as analytical tool

Identified collaborative open textbook production models

Bovill (2020) terms of inclusion

(adapted by DOT4D)

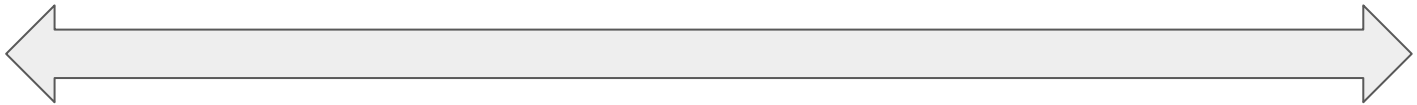
Participatory design	Stakeholders contribute to the design and development of initiatives. including curriculum; students are “testers or informants” and don’t have a high level of agency
Engagement	Activities to motivate and interest students; can include engagement in teaching and learning
Partnership	Collaborative; contribute equally; some pedagogical conceptualisation and decision-making; implementation and analysis

Bovill terms of inclusion (cont.)

Co-creation	Contribute new pedagogical ideas; empowerment; meaningful engagement; students construct understanding and learning resources
Representative	Elected role, small group representing whole group
Consultant	Students selected and paid to collaborate
Co-researcher	Collaborating meaningfully on teaching and learning research or subject based research
Co-designer	Sharing responsibility for designing learning, teaching and assessment

Social injustice remedy continuum

	AFFIRMATIVE REMEDY		TRANSFORMATIVE REMEDY	
None	Participatory design	Engagement	Co-creation	Partnership



Heat map ranking initiatives in terms of degree of social justice remedy (least to most, colleague and student)

	Terms of inclusion: Colleagues			Terms of inclusion: Students			*Model*
	Authorship	**Quality assurance**	**Publishing**	**Authorship**	**Quality assurance**	**Publishing**	
Mechanical engineering	Engagement	Participatory design	None	Engagement	Participatory design	None	***Participatory Design/ Engagement Model***
General surgery	Participatory design	Participatory design	None	Participatory design	Participatory design	None	
Abstract algebra	None	Engagement	None	Engagement	Engagement	None	
Construction management	None	Participatory design	Participatory design	Engagement:	Participatory design	None	

	Terms of inclusion: Colleagues			Terms of inclusion: Students			*Model*
	Authorship	**Quality assurance**	**Publishing**	**Authorship**	**Quality assurance**	**Publishing**	
Marketing	Co-creation: co-design	Participatory design	Participatory design	Co-creation: co-design	[Ongoing: Engagement]	None	***Participatory / Engagement and Co-Creation Model***
Orthopaedic surgery	Co-creation: co-design	Engagement	Engagement/ Co-creation	Co-creation: co-designer/ representative	Engagement	None	
Architecture	None	Co-creation: consultant	Participatory design	Co-creation: co-researcher	[Ongoing: Engagement]	None	
Statistics	Co-creation: consultant/ co-researcher	Co-creation: consultant/ co-researcher	None	Co-creation: consultant/ co-researcher	Co-creation: consultant/ co-researcher	None	***Co-Creation Model***
Complex numbers	Partnership	Partnership	Participatory design	Co-creation: co-researcher Co-designer, representative, consultant	Participatory design	None	***Co-Creation/ Partnership Model***
Computer science	Partnership	Partnership	Participatory design	Engagement Co-creation: consultant	[Ongoing engagement]	None	
Chemistry	Partnership	Partnership	Participatory design	Co-creation: co-researcher	Co-creation: representative	None	

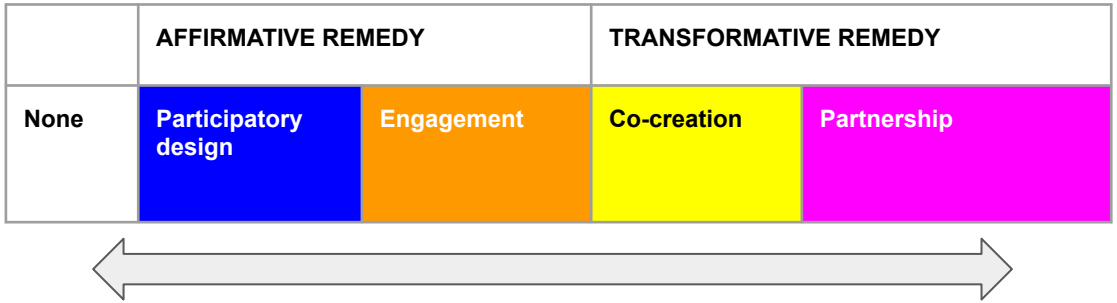
Production models and student co-creation

Collaborative open textbook production models

Aim: Provide open textbook creators with sustainable models of production that manifest “parity of participation” as the just end point of social justice

DOT4D context: Four models of open textbook production reflecting varying levels of students and colleague collaboration

- **Participatory/Engagement Model**
- **Participatory/Engagement and Co-Creation Model**
- **Co-Creation Model**
- **Co-Creation/Partnership Model**



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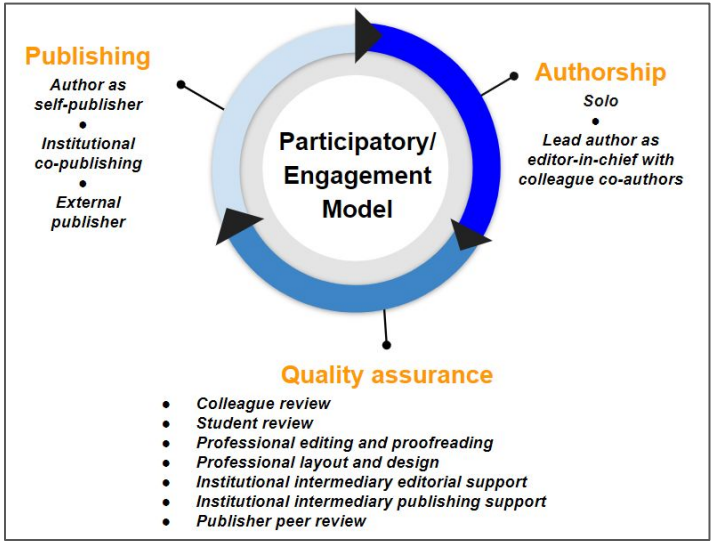
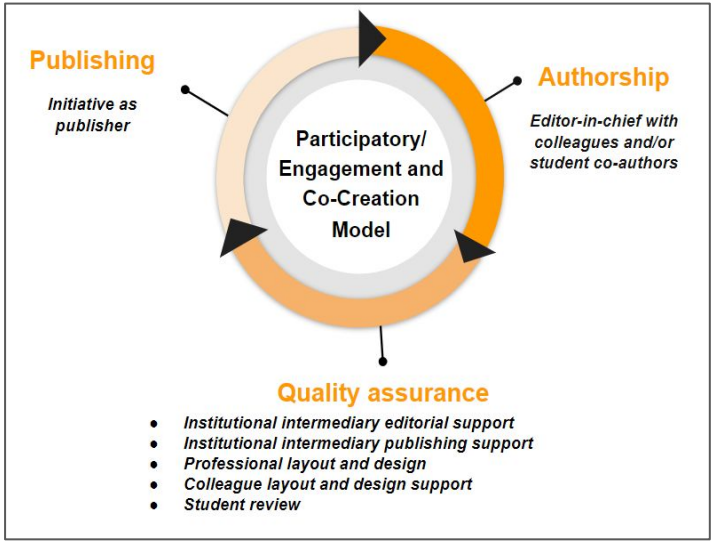
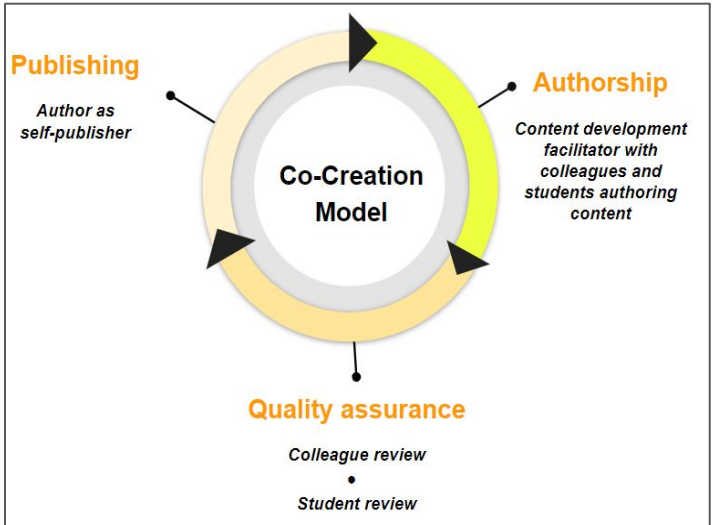
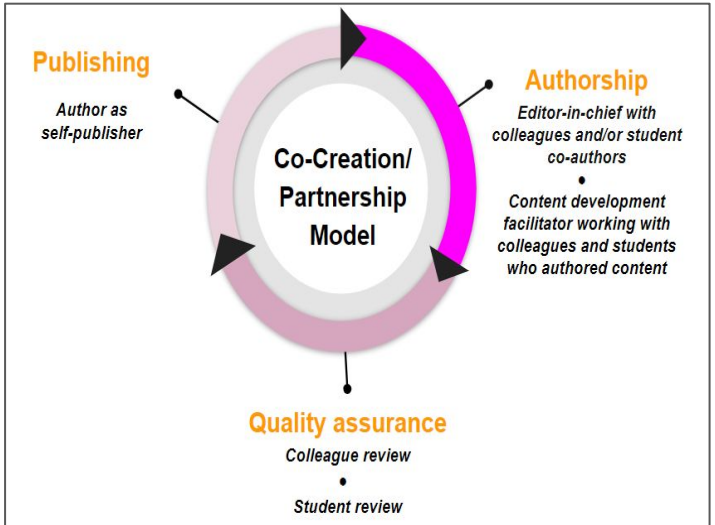

Publishing
Author as self-publisher
•
Institutional co-publishing
•
External publisher
Participatory/ Engagement Model
Authorship
Solo
•
Lead author as editor-in-chief with colleague co-authors
Quality assurance
Colleague review
Student review
Professional editing and proofreading
Professional layout 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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How would you approach your open textbook authoring, quality assurance and publishing and which model would you use?

All models move towards social justice (affirmative to transformative)

Next steps: researching the co-creation experience from authors and importantly student perspectives.

Thank you

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