

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

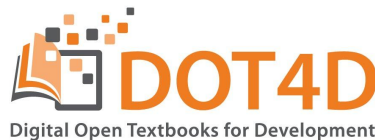
By Glenda Cox, Bianca Masuku & Michelle Willmers

Digital Open Textbooks for Development, Centre for Innovation in Learning and Teaching,
University of Cape Town

May 2022



Centre for
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UNESCO CHAIR
IN OPEN EDUCATION
AND SOCIAL JUSTICE



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.



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Principal Investigator



Bianca Masuku
Researcher



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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



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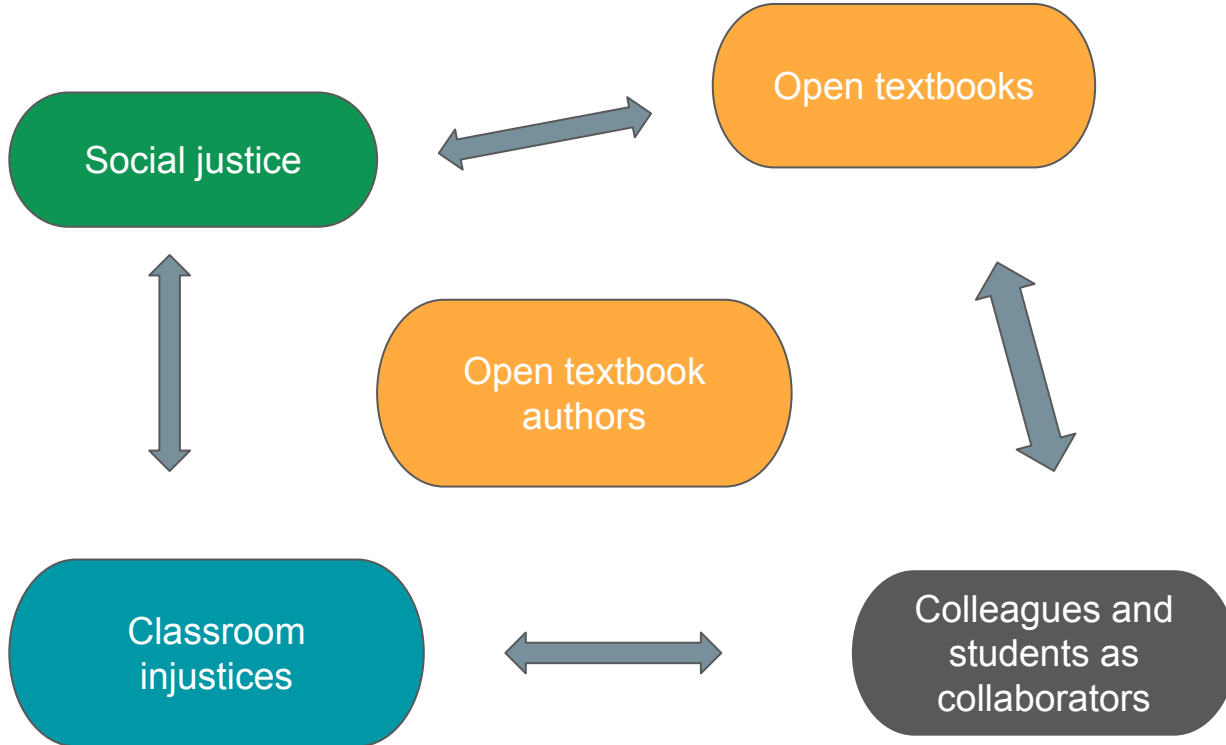
**Author affiliations can be found in the back matter of this article*

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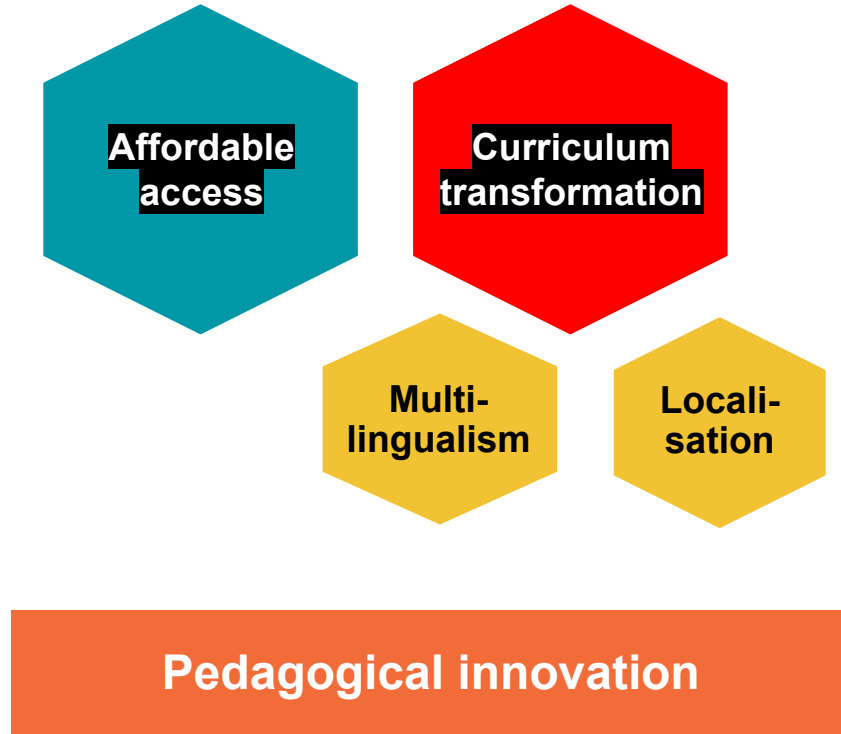
Key features of open textbooks for social justice

- 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 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)



Social Justice as participatory parity (Fraser)

Economic

- Material resources
- Maldistribution and redistribution

Cultural

- Cultural attributes
- Misrecognition and recognition

Political

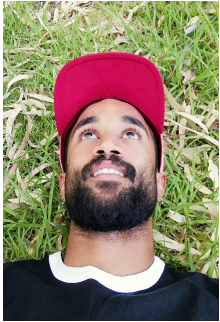
- Political voice
- Mis/representation mis/framing

- > **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

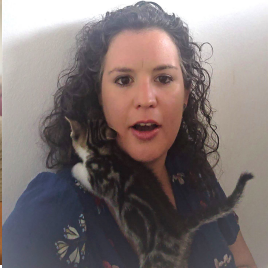
UCT open textbook authors in the DOT4D study



[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



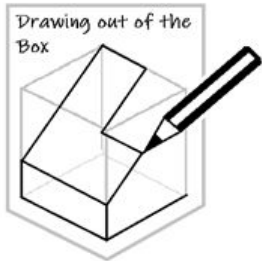
[Dr Michael Held](#),
Orthopaedic Surgery



[Dr Claire Blackman](#)
Mathematics

DOT4D grantees

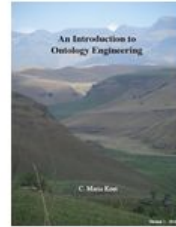
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Method

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)

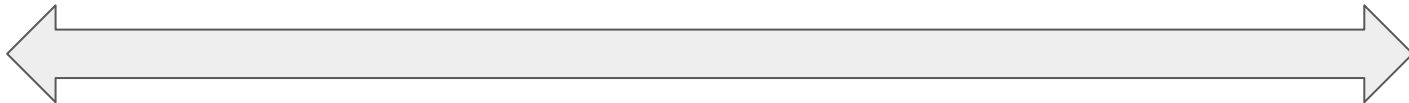
| | |
|-----------------------------|--|
| Participatory design | Stakeholders contribute to the design and development of initiatives, including curriculum; students are “testers or informants” and don’t have a high level of agency |
| Engagement | Activities to motivate and interest students; can include 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 justice 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 | | | <i>Model</i> |
|--------------------------------|--------------------------------|----------------------|----------------------|------------------------------|----------------------|------------|---|
| | Authorship | Quality assurance | Publishing | Authorship | Quality assurance | Publishing | |
| Mechanical engineering | Engagement | Participatory design | None | Engagement | Participatory design | None | <i>Participatory Design/Engagement Model</i> |
| 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 | | | <i>Model</i> |
|----------------------------|--|--|-------------------------|--|--|------------|---|
| | Authorship | Quality assurance | Publishing | Authorship | Quality assurance | Publishing | |
| Marketing | Co-creation: co-design | Participatory design | Participatory design | Co-creation: co-design | [Ongoing: Engagement] | None | <i>Participatory / Engagement and Co-Creation Model</i> |
| 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 | <i>Co-Creation Model</i> |
| Complex numbers | Partnership | Partnership | Participatory design | Co-creation: co-researcher Co-designer, representative, consultant | Participatory design | None | <i>Co-Creation/ Partnership Model</i> |
| 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

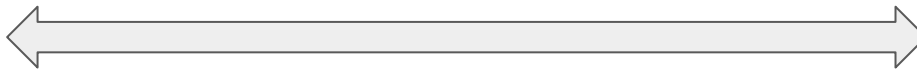
Collaborative open textbook production models

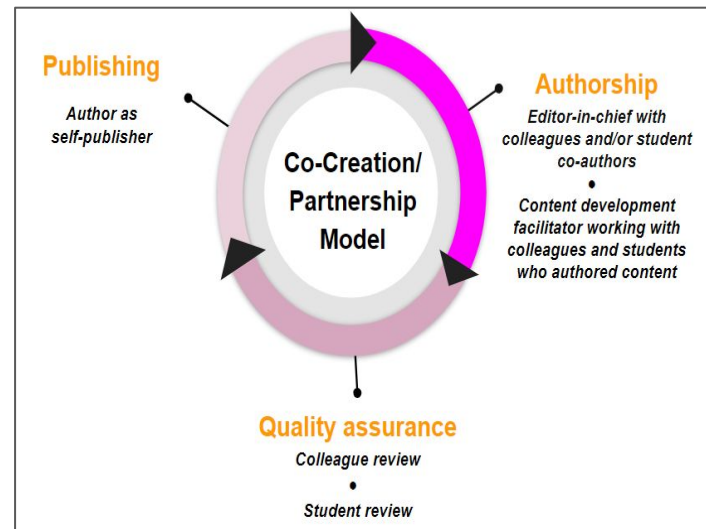
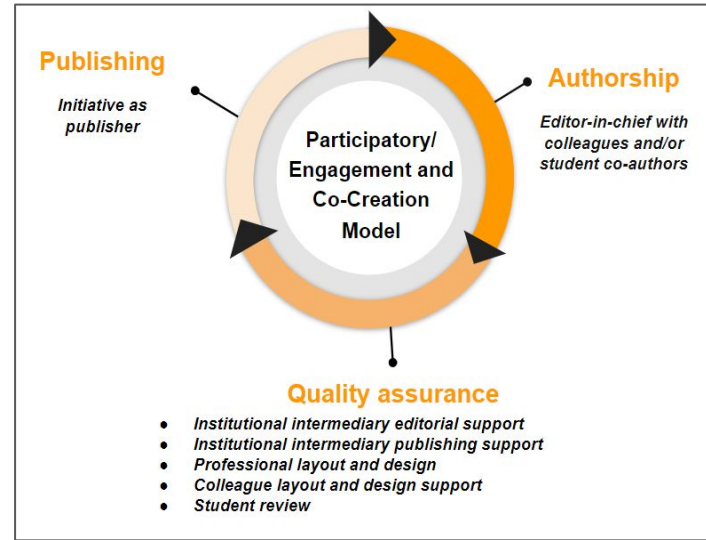
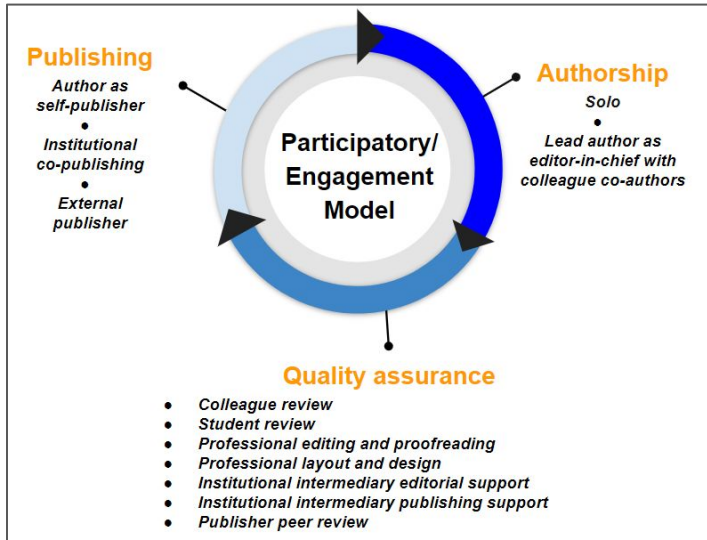
Aim: Provide open textbook creators with sustainable models of production that manifest “parity of participation” as the just end point of social justice

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**

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





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.



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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