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

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

KATHERINE WILLIAMS
ERIC WERTH

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

Open textbooks

Open textbook authors

Classroom injustices

Colleagues and students as collaborators
Social justice drivers for open textbook production at UCT

- Affordable access
- Curriculum transformation
- Multi-lingualism
- Localisation

Pedagogical innovation
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
- Misrepresentation 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
DOT4D grantees

Engineering and the Built Environment

Science

First-Year Mathematics Textbooks for South Africa
First-year Chemistry in South African context

Health Sciences

Centre for Higher Education Development

Commerce

Statistics: Introduction to Probability in isiXhosa
Marketing to the South African Consumer

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

- 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.

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.
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)

<table>
<thead>
<tr>
<th>Participatory design</th>
<th>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</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engagement</td>
<td>Activities to motivate and interest students; can include engagement in teaching and learning</td>
</tr>
<tr>
<td>Partnership</td>
<td>Collaborative; contribute equally; some pedagogical conceptualisation and decision-making; implementation and analysis</td>
</tr>
<tr>
<td>Co-creation</td>
<td>Contribute new pedagogical ideas; empowerment; meaningful engagement; students construct understanding and learning resources</td>
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<tr>
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<tr>
<td>Representative</td>
<td>Elected role, small group representing whole group</td>
</tr>
<tr>
<td>Consultant</td>
<td>Students selected and paid to collaborate</td>
</tr>
<tr>
<td>Co-researcher</td>
<td>Collaborating meaningfully on teaching and learning research or subject based research</td>
</tr>
<tr>
<td>Co-designer</td>
<td>Sharing responsibility for designing learning, teaching and assessment</td>
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</tbody>
</table>
# Social injustice remedy continuum

<table>
<thead>
<tr>
<th>None</th>
<th>Participatory design</th>
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<th>Co-creation</th>
<th>Partnership</th>
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<table>
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<tr>
<th>AFFIRMATIVE REMEDY</th>
<th>TRANSFORMATIVE REMEDY</th>
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<tr>
<td></td>
<td></td>
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<tr>
<td>Terms of inclusion: Colleagues</td>
<td>Terms of inclusion: Students</td>
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<tr>
<td>--------------------------------</td>
<td>-----------------------------</td>
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<tr>
<td>Authorship</td>
<td>Quality assurance</td>
</tr>
<tr>
<td>Mechanical engineering</td>
<td>Engagement</td>
</tr>
<tr>
<td>General surgery</td>
<td>Participatory design</td>
</tr>
<tr>
<td>Abstract algebra</td>
<td>None</td>
</tr>
<tr>
<td>Construction management</td>
<td>None</td>
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<td>Authorship</td>
<td>Quality assurance</td>
</tr>
<tr>
<td>Marketing</td>
<td>Co-creation: co-design</td>
</tr>
<tr>
<td>Orthopaedic surgery</td>
<td>Co-creation: co-design</td>
</tr>
<tr>
<td>Architecture</td>
<td>None</td>
</tr>
<tr>
<td>Statistics</td>
<td>Co-creation: consultant/co-researcher</td>
</tr>
<tr>
<td>Complex numbers</td>
<td>Partnership</td>
</tr>
<tr>
<td>Computer science</td>
<td>Partnership</td>
</tr>
<tr>
<td>Chemistry</td>
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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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None
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
References:


