



‘Open Textbooks in South African Higher Education’ Roundtable Report

Produced by the Digital Open Textbooks for Development Project
University of Cape Town
September 2021

Introduction

In July 2021, the Digital Open Textbooks for Development (DOT4D) project issued a [‘Call to Action’](#) to university managers, government higher education bodies, and knowledge production sector partners (including libraries), urging them to seek ways to provide greater access to locally appropriate teaching materials that can be freely/legally shared online. More than 45 respondents from across the national education landscape heeded the call and joined DOT4D for an ‘Open Textbooks in South African Higher Education’ virtual roundtable on 7 July 2021 to explore how South African open education stakeholders can collaborate going forward.

The problem

One of the challenges experienced in South African higher education (HE) is a lack of access to affordable, appropriate textbooks and other teaching materials that can be legally shared on online forums and the internet. In addition to challenges related to cost, there are also increasing calls to address transformation and social justice in South African HE through curriculum transformation. In many instances, South African university students are opting not to purchase textbooks – partly because they are unaffordable, but also because they are unfit for the local context or because courses only make use of a fraction of the overall textbook content.

What are open textbooks?

Open textbooks are digital, free to use and openly licensed collections of course-related teaching and learning content published on platforms and in formats that allow for the integration of multimedia and ancillary practice or assessment components.

These locally produced textbooks present opportunities for inclusive, collaborative authorship strategies. The open licensing aspect also means that these resources can be legally shared and redistributed, both within and beyond the institution.

The solution

Open textbooks have the potential to address cost-savings and contribute to improved social justice in teaching and learning through inclusive content development strategies.

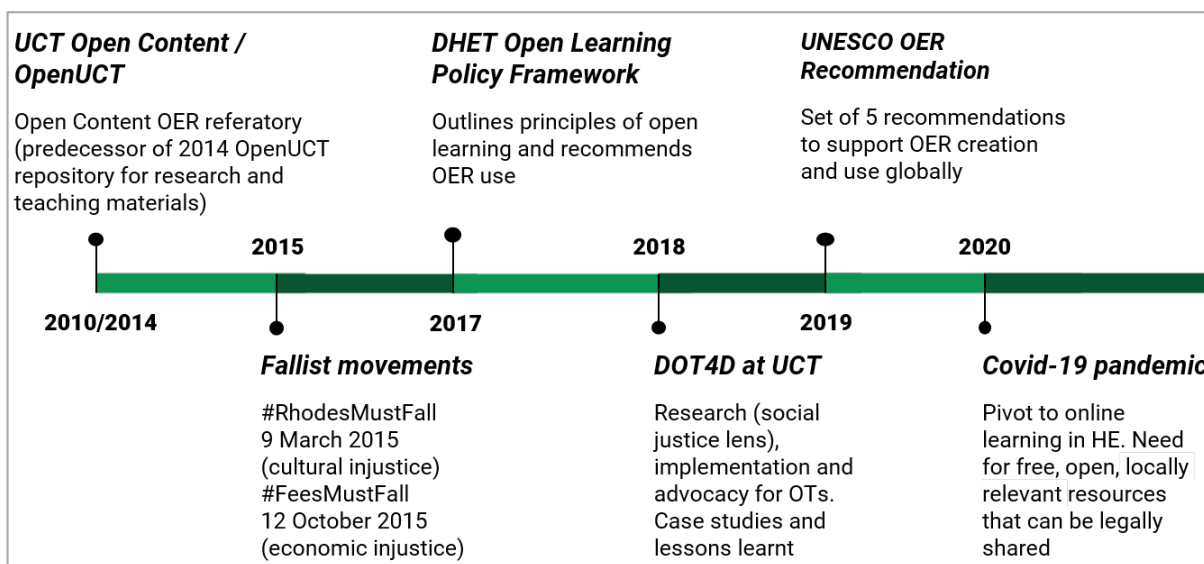
Digital Open Textbooks for Development

Located in the Centre for Innovation in Learning and Teaching (CILT) at the University of Cape Town (UCT), the DOT4D project aims to promote inclusion in South African higher education. It does so by **exploring the potential of open textbooks to address equitable access** to relevant learning resources in South African higher education. Its specific objectives are to:

1. Research: identify open textbook approaches that address social (in)justice.
2. Implement: support open textbook publishing activities at UCT (through small grants to academics) that integrate student perspectives, curriculum transformation and sustainability.
3. Advocate: inform textbook publishing policy-development initiatives at institutional and national levels.

DOT4D emerges from a long history of open educational advocacy within CILT, drawing especially on the lessons learned from the Research on Open Educational Resources for Development (ROER4D) project which ran from 2014–2017. It is also informed by contemporary experiences and needs that have shaped the South African HE landscape.

Timeline of events informing DOT4D advocacy

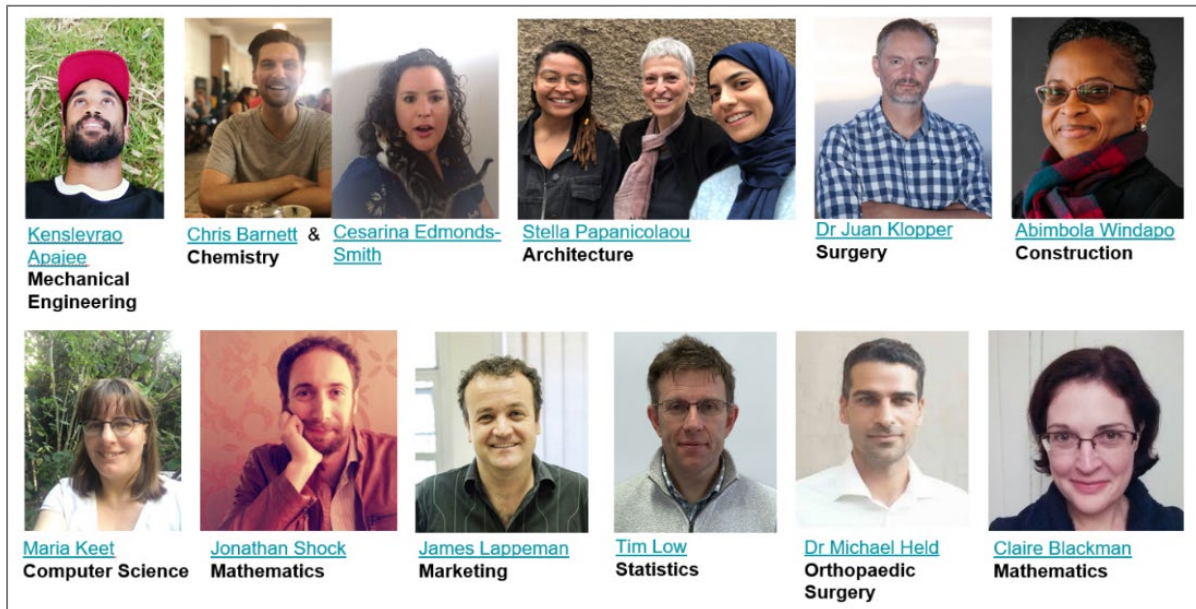


Based on these challenges and experiences, DOT4D has proposed that South African open education advocates and practitioners across the HE sector collaborate around OER and open textbooks as a response to these events.

Research findings

DOT4D's research findings are drawn from the experiences of [12 open textbook authors](#) at UCT, 11 of whom received grants from DOT4D to develop open textbooks. The authors were a diverse group of academics at various stages in their careers who taught in a number of disciplines.

UCT open textbook authors in the DOT4D study



These open textbook authors used a number of approaches with varying degrees of success and were driven by a range of motivations.

Grantees' motivations for creating open textbooks



All of these motivations are informed by the need to address **social (in)justice in the classroom**. To better understand how these open textbook projects might contribute to social justice, DOT4D used Nancy Fraser's work to analyse how they addressed economic, cultural and political injustices faced by their students.

How open textbooks address social (in)justice in the classroom

| Economic maldistribution | Cultural misrecognition | Political misrepresentation |
|---|--|---|
| <p>Academics at UCT are aware of the challenges related to the cost of traditional textbooks and are experimenting with new approaches towards resource creation through open practice. Open textbooks have the potential to disrupt histories of exclusion in South African HEIs through the creation of affordable resources.</p> | <p>UCT's open textbook authors seek to make content more accessible in terms of relevance, language, format and genre so as to promote inclusivity. Authors' pedagogical approaches informed their perceptions of possible cultural affordances, such as incorporating multiple voices and making it locally relevant.</p> | <p>Academics at UCT acknowledge that there is a legacy of gatekeeping in prescribing textbooks which misframe and exclude different groups. Thus, they try to include students in content development so as to shift power and build student confidence. These strategies empower students and counter existing publishing models</p> |

Implementation insights

Publishing and implementation work undertaken with DOT4D grantees suggests that locally published open textbooks present opportunities for inclusive, collaborative authorship strategies. The current open textbook landscape at UCT currently presents:

- A range of authorship, content development, quality assurance and publishing models (generally collaborative), often influenced by discipline.
- A range in degree of technological sophistication in content delivery, with a growing expectation on the part of students and lecturers for affordances to be able to share and access dynamic, interactive content.
- Questions concerning where to publish/host content (particularly dynamic, interactive content).
- New roles and responsibilities for academics managing editorial and publishing processes.
- The ongoing challenge of time constraint, resourcing and support.

Insights from DOT4D publishing and implementation work further suggest that institutions can employ a number of mechanisms to support open textbook development, including:

Small to medium-sized grants to facilitate open textbook development and publishing

Recognition of open textbook development for promotion and reward

Relief from academic duties for the sake of (time-consuming) open textbook production

Updating intellectual property policies to facilitate open textbook production

Investment in IT infrastructure to facilitate textbook creation, publishing and curation across a wide range of formats and disciplines

Advocacy efforts

The path to open textbook development can seem intimidating and complicated for many academics and university managers. The DOT4D project has produced a series of [Open Textbook Journeys](#) which detail the experiences of the open textbook authors at UCT who participated in the project's research and implementation activities. These stories reveal the various strategies and challenges involved, as well as the potential opportunities and rewards for both lecturers and students.

To share the insights gained in the project and to invite collaborators to share in promoting national conversation around open textbook development, the DOT4D project hosted the 'Open Textbooks in South African Higher Education' virtual roundtable event to explore synergies and collaboration opportunities. The rest of this document reports on that interaction.

The 'Open Textbooks in South African Higher Education' roundtable event

The objectives of the DOT4D 'Open Textbooks in South African Higher Education' roundtable event held on 7 July 2021 were to:

- Raise awareness of open textbooks as a strategy for addressing financial cost burden, curriculum transformation and decolonisation, and the performance gap in South African HEIs.
- Articulate mechanisms that can be employed across institutions to support open textbook development.
- Identify a community of practice in the South African higher education sector that can collaborate on supporting open textbook production.

National representation in the forum

Roundtable participants hailed from more than a dozen institutions and organisations across the country (and beyond), which highlighted the growing interest in exploring the potential of open textbooks in addressing current issues related to cost and inclusivity in South African HE.

Organisations represented in the roundtable event



After an introduction to DOT4D and the objectives of the roundtable, two guest speakers opened the discussion, shedding light on open textbooks from two very different perspectives. The first came from UCT academic, Jonathan Shock, who shared his experiences as an educator who developed part of an open textbook as a DOT4D grantee. The second came from Associate Professor Lis Lange, UCT Deputy Vice-Chancellor for Teaching and Learning, who shed light on the university management’s perspective, discussing how institutional support is critical to the sustainability of open textbook initiatives going forward.

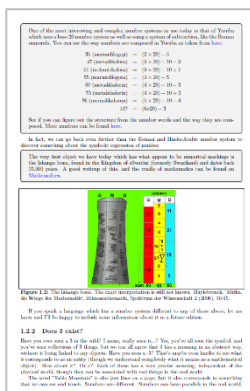
Institutional views on open textbooks

Jonathan Shock: Open textbooks and mathematics for South African students

Dr Jonathan Shock, a Senior Lecturer in the Department of Mathematics and Applied Mathematics at UCT, received a DOT4D grant to work on a chapter for an open textbook for a first-year mathematics course for science students. The course is large, usually with around 800 students. However, two challenges to student success stand out. First, the prescribed textbook costs almost R1,000, a huge expense for South African students. Second, there is a big gap between what school-leavers learn in high school and what is required at university.

The key pedagogical question Jonathan had in mind as he planned the textbook was: How do we engage students in mathematical thinking? He had been pondering this since his first foray into open educational resources in 2014 when he joined [Mathemafrika](#), a blogging platform for discussing maths teaching in Africa. Through discussions on the site with teachers and students, he came to believe that an educator's pedagogical approach has to start from knowing where the student is at. Mathemafrika modelled the kind of dynamic, interactive and open approaches he hoped to replicate in his textbook.

DOT4D provided Jonathan with a grant to produce the first chapter of his textbook, '[Introduction to Complex Numbers](#)'. He and three third-year students collaborated in writing it in a narrative style so readers could 'think' about the concepts in a more mathematical fashion than is usually shown in traditional textbooks. All of the funding for the project went to the students for their work. The openly licensed chapter has had almost 1,000 downloads from around the world.



DVC Lange: Institutional support for open textbooks

DVC Lange has been a strong supporter of DOT4D since its inception. She believes that it contributes to the transformation of the teaching and learning space at the university, and stated that the concepts of social justice and decolonisation have been compelling features of the project from its inception.



Lange argued that, in order for the university to support and scale ongoing open textbook activity, it needs appropriate funding, policies and frameworks. She also noted the importance of initiatives such as the [UCT Open Textbook Award](#), which was launched in 2020.

However, because research has maximum value for promotion, the DVC noted that it was important to include open textbook production in promotion considerations if it is to become sustainable. Strategically, the university leadership is responsible for understanding the potential of open textbooks in terms of optimising teaching and learning.

The student collaboration involved in producing open textbooks shows how conditions for 'deep learning' can be created. Indeed, if UCT is going to move towards a more digitally enabled learning space, then student involvement is a critical way to ensure real access and success.

Roundtable discussion

With an understanding of DOT4D's mission in mind (and the perspectives shared by the guest speakers), discussion was facilitated around two areas of interest: mechanisms for institutional open textbook support and national collaboration.

Mechanisms for institutional open textbook support

Three questions were presented on a virtual '[jamboard](#)'. The primary responses to these questions are collated on the digital sticky notes below.

What kinds of activities at your institution or organisation support open education?

Educator Interactions: Activities that are intended to help people to "learn to share", which are just as important as activities that encourage "sharing for learning"

OER Engagement: OER are prescribed alongside traditional textbooks / OER grants / Open Ed Influencers assist academics to find OER / Open Monograph Press initiative / Open textbook publishing

OER Initiatives: The OER Fellows programme provides funding to lecturers for researching & developing OER / Looking into ways to recognise OER & OT creation as academic outputs / OER for community use

Licensing: Share MOOC materials under Creative Commons licences & contribute open materials to Wikimedia Commons

No understanding or support: Not sure anyone knows what open education is, but we can do more to incentivise & reward collaboration / We are incentivised NOT to engage in open ed / Management lacks understanding

Are you ready for open textbooks and is your institution ready?

Yes, the need is dire: SAULM says 19% of students can't access textbooks. 68% get copies digitally (29% via piracy, 23% via OA channels). / Some students must buy textbooks "or" laptops, because they cannot afford both.

Yes, but...: Just need to find time! / Adoption is uneven. A few depts prescribe OER, while others only see OER as adjuncts to textbooks. / The pandemic makes it more challenging: people don't have the head space.

Not really: Some lecturers are ready, but not management. / Finding & scaling interactive tools is a challenge. / Many use "open" terms interchangeably, so we need to raise awareness. / No adequate funding.

What kind of help do you need?

Tech Support & Training: Assistance with selecting & managing an appropriate platform. / Advice on the technicalities of creating & publishing an open textbook.

Finding Stuff: The needs from open textbook developers vary a lot, but if we could share training and capacity building opportunities, that would be a good start.

Collaborative Opportunities: I would love to collaborate with colleagues at other universities. / Perhaps we can share ideas within a formal community of practice.

Examples of Best Practice & Good Outcomes: Inspiration stories where people share benefits for themselves and students.

Time: Our time is limited, and while funding students is important to collaborate with, sometimes time itself is the limiting factor.

Processes: A workflow that collaborators can agree on. / Guidelines for lecturers to evaluate OER. Accessible information about licensing that isn't scary or legalistic.

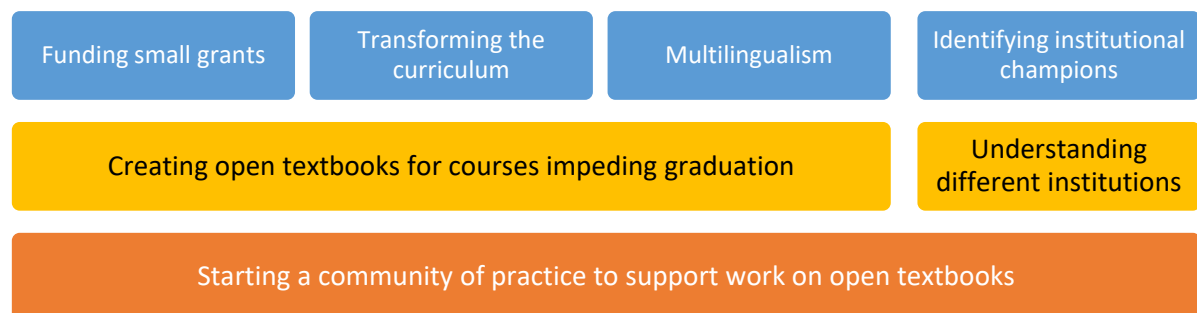
Money: Student engagement outside of curriculum demands lots of time and energy, so we need funds to pay them.

Leadership: There is a need for a set of champions and executive enablers who can get things unstuck!

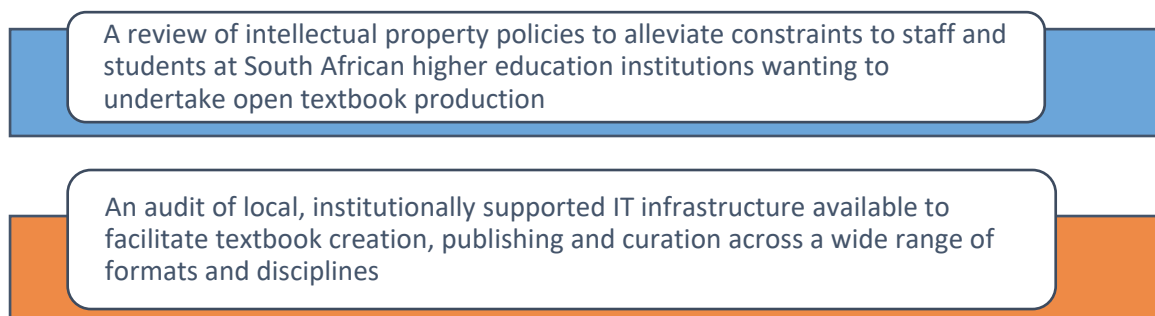
National collaboration ideas

There was consensus amongst participants that a national-level, sector-wide collaborative effort was critical for ensuring that open textbook development was more widely adopted and supported. It was noted that collaboration could help overcome related skills shortages, as the skills possessed by the participating group are broad, diverse and deep. Collaboration would also improve access to ‘collaborative funding’ options, in which grants are predicated on inter-institutional collaboration. Through collaboration, a community of practice would further develop. It would also allow for discussion about how to develop a shared approach to intellectual property across institutions. Rather than looking at open textbook development and collaboration *in general*, the forum discussed how to focus efforts on more specific targets.

Where to focus efforts?



What else do we need to do?



What can DOT4D offer going forward?

The DOT4D project currently has funding until January 2022 and offered some capacity to help a sustainable mechanism for keeping this work going. Over the next six months, it plans to coordinate follow-up sessions in collaboration with volunteer participants.

Conclusion

This national roundtable represents an important occasion in the adoption and development of open textbook strategies in South African higher education. It marks the culmination of DOT4D’s research, implementation and advocacy work as facilitators of open textbook development at UCT. Within the context of the roundtable, it has encouraged interested colleagues to connect and collaborate across the higher education sector so that this work can continue.

South African students face a number of economic, cultural and political inequities in their educational pursuits, it is therefore critical that we find sustainable solutions that either overcome these problems or at least ameliorate their worst effects. The DOT4D initiative has shown that open textbook development can address a variety of social justice imperatives that help students in meaningful ways, but has noted national-level collaboration of all interested parties in South Africa's higher education sector will be required in order to make this activity scalable and sustainable. Roundtable participants agreed that now is the time to mark the beginning of this collaboration in building a more open and socially just higher education environment through open textbook development.

Recommendation

It is critical to maximise efficiencies and address sustainability across the South African higher education sector. Demand is growing for open textbook development support as academics change the way they teach online. In addition, localisation is key to decolonial/curriculum transformation. Thus, DOT4D believes that synergies and efficiencies can be gained by addressing open textbook production by collaborating across the education sector.

This work is licensed under a Creative Commons Attribution 4.0 International (CC BY 4.0) licence. It was carried out with the aid of a grant from the International Development Research Centre (IDRC), Ottawa, Canada.



Corresponding author:

DOT4D Principal Investigator Dr Glenda Cox <glenda.cox@uct.ac.za>

How to cite this resource:

DOT4D (2021). *Open Textbooks in South African Higher Education Roundtable Report*. Cape Town: Digital Open Textbooks for Development.