

# Open education and social justice: Collaboration and student co-creation at the University of Cape Town

By Glenda Cox

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



UNESCO CHAIR  
IN OPEN EDUCATION  
AND SOCIAL JUSTICE



# University of Cape Town

**28 703**

STUDENTS

**4 928 staff** (1 184  
academic and 3 744  
professional,  
administrative support  
and service staff).





UNESCO CHAIR  
IN OPEN EDUCATION  
AND SOCIAL JUSTICE



Chair of OE Global  
conference, Cape  
Town, 2017





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Sentrum vir Innovasie in Leer en Onderrig  
IZiko loDalo - Nguqu kwezokufunda nokuFundisa



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## About CILT

### Overview



## Unleash Teaching and Learning

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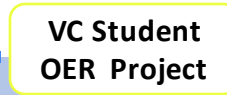
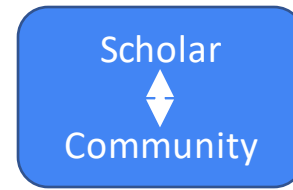
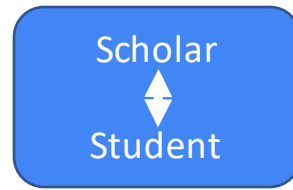
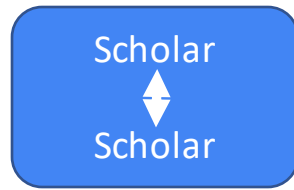


The Centre for Innovation in Learning and Teaching (CILT) is committed to a higher education environment that fosters transformative and reflexive practices in learning and teaching. We strive to create a socially responsive and contextually relevant teaching and learning environment that embraces principles of openness. Our key focus areas include staff development, course and curriculum design, and educational technologies.

CILT responds to teaching and learning challenges at UCT and the broader higher education environment through learner-centred pedagogic practices. In face-to-face and online environments, we encourage the adoption of innovative practices through critical engagements with staff and students. We support curriculum initiatives underpinned by values and skills ranging from graduate attributes and digital literacies to community engagement and social justice.

# Open Education at UCT

- 2007
- 2008
- 2009
- 2010
- 2011
- 2012
- 2013
- 2014
- 2015
- 2016
- 2018-



# Open Education

**Open is based on the philosophical view of  
“knowledge as a collective social product and the  
desirability of making it a social property”**

(Prasad & Ambedkar in Downes, 2007:1)



Photo by [freestocks.org](https://www.freestocks.org) on [Unsplash](https://www.unsplash.com)



# Open Education (OE)

Open Education is an international movement to make education **accessible** to all (Cape Town Open Education Declaration)

Broad view of education, beyond institutions

**Collective term** used to refer to practices & activities that have both openness & education at their core



# 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



Open Textbooks at UCT

# Digital Open Textbooks for Development (DOT4D)

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**

# Economics

Student protest #fees must fall



## openstax

We visited Rice University and spoke with students about their perspectives on free textbooks. Check back tomorrow to see another student's perspective. [#ForStudentsForever](#)

<https://africanarguments.org/2021/06/fallisms-faultlines-the-paradoxes-of-fees-must-fall/>



# Culture and representation



#Rhodesmustfall



Cape Town U Must Fall protests

<https://www.educationworld.in/south-africa-must-fall-protests-report/>

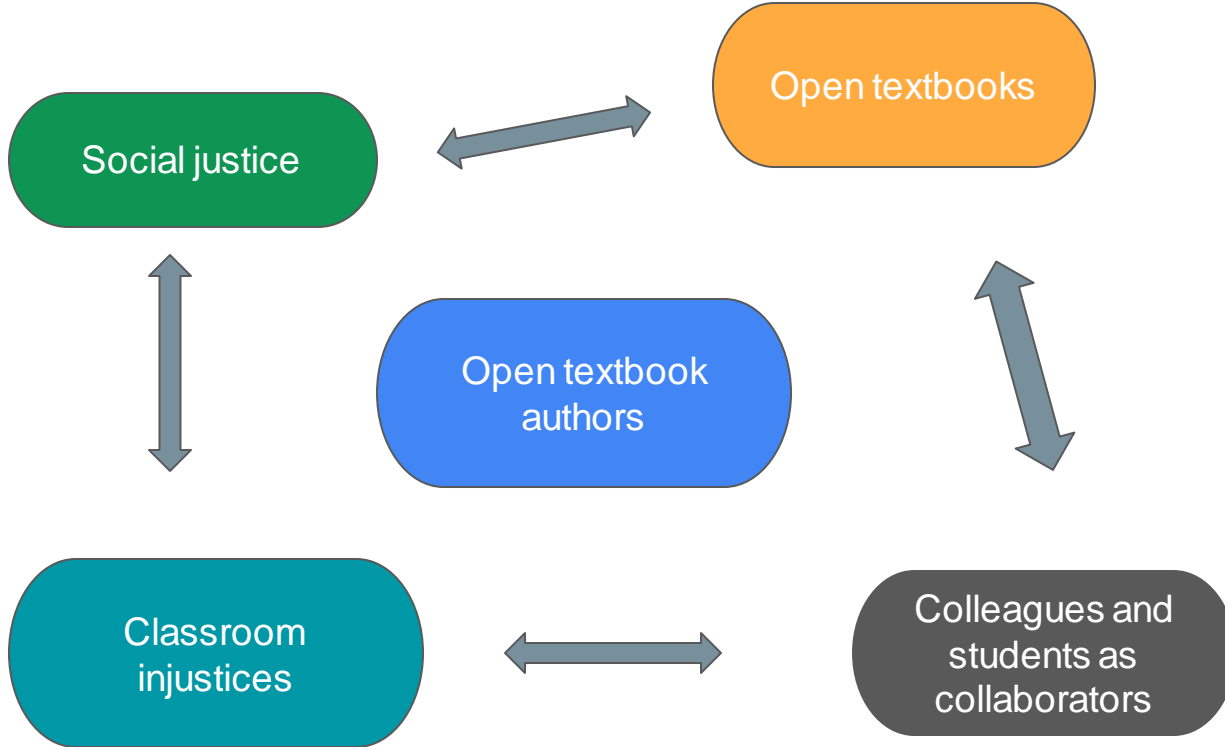


<https://www.buzzfeed.com/husseinkesvani/oxford-campaign-rhodes-must-fall>

# 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

# 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)

# Overcoming injustices: Affirmative or transformative

Fraser identifies two types of strategies to overcome injustice: *affirmative* strategies, which include activities aimed at ameliorating the scope or intensity of a particular injustice; and *transformative* strategies, which seek to address the root cause of an injustice.

# Social justice strives for

- Economic equity
- Cultural diversity
- Political inclusion

an **outcome** where all the relevant social actors [can] participate as peers in social life (Fraser 2005:87)

*and*

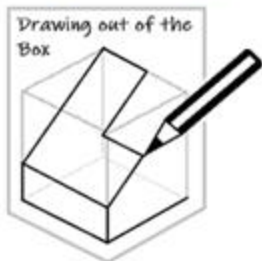
and a **process** in which procedural standards are followed in fair and open processes of deliberation (Fraser 2005:87)

# Method

- Interviews
- Surveys
- Grant applications
- Grant reports
- Field notes



## Engineering and the Built Environment



First-Year  
Mechanical  
Engineering Drawing



Architecture of the  
Modern Movement  
in the Global South

## Science



Computer  
Science



Mathematics  
Textbooks for South  
Africa



First-year Chemistry  
in South African  
context

## Health Sciences



Learning Innovation  
through Orthopaedic  
Network



## Centre for Higher Education Development



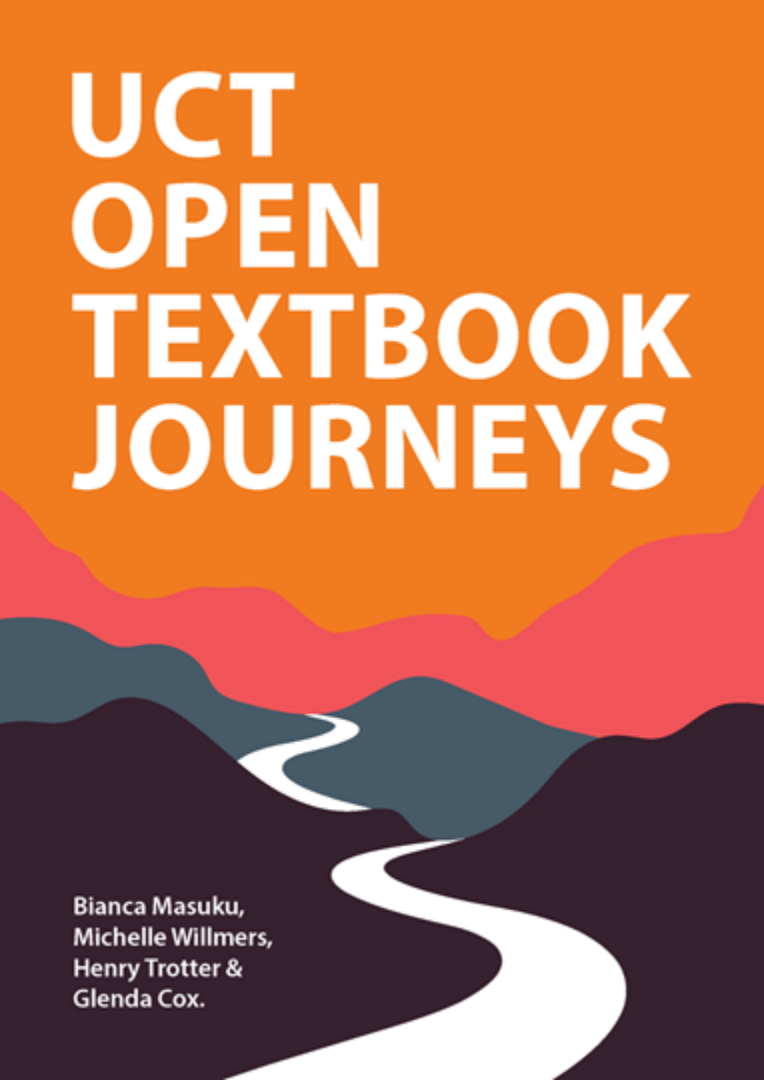
Statistics: Introduction to  
Probability in isiXhosa

## Commerce



Drivers/motivation	Social Justice dimension (Fraser, 2005)	The role of the Open Textbook:
Affordable access	Economic (maldistribution of resources)	<b>Saving students money</b>
Multilingualism	Cultural (misrecognition)	<b>Terminology in Chemistry and Statistics translated into local languages with the help of students</b>
Curriculum transformation	Cultural (misrecognition of culture and identities) & Political (misrepresentation or exclusion of voice)	<b>Inclusion of local cases and examples, making textbooks relevant</b>  <b>Collaboration with colleagues and students (empowering and giving voice)</b>
Pedagogical innovation	Political (misrepresentation or exclusion of voice)	<b><i>Two examples of changing 'classroom' practice to deliberately include students as content creators</i></b>

# UCT OPEN TEXTBOOK JOURNEYS



Bianca Masuku,  
Michelle Willmers,  
Henry Trotter &  
Glenda Cox.

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>

# Understanding collaboration

# Bovill (2020) terms of inclusion

(adapted by DOT4D)

<b>Participatory design</b>	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
<b>Engagement</b>	Activities to motivate and interest students; can include engagement in teaching and learning
<b>Partnership</b>	Collaborative; contribute equally; some pedagogical conceptualisation and decision-making; implementation and analysis

# Bovill terms of inclusion (cont.)

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

# Social justice remedy continuum

	AFFIRMATIVE REMEDY		TRANSFORMATIVE REMEDY	
None	<b>Participatory design</b>	<b>Engagement</b>	<b>Co-creation</b>	<b>Partnership</b>



## 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	
<b>Mechanical engineering</b>	Engagement	Participatory design	None	Engagement	Participatory design	None	<b><i>Participatory Design/Engagement Model</i></b>
<b>General surgery</b>	Participatory design	Participatory design	None	Participatory design	Participatory design	None	
<b>Abstract algebra</b>	None	Engagement	None	Engagement	Engagement	None	
<b>Construction management</b>	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	
<b>Marketing</b>	Co-creation:co-design	Participatory design	Participatory design	Co-creation:co-design	[Ongoing: Engagement]	None	<i>Participatory / Engagement and Co-Creation Model</i>
<b>Orthopaedic surgery</b>	Co-creation:co-design	Engagement	Engagement/Co-creation	Co-creation:co-designer/representative	Engagement	None	
<b>Architecture</b>	None	Co-creation: consultant	Participatory design	Co-creation: co-researcher	[Ongoing: Engagement]	None	
<b>Statistics</b>	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>
<b>Complex numbers</b>	Partnership	Partnership	Participatory design	Co-creation:co-researcher Co-designer, representative, consultant	Participatory design	None	<i>Co-Creation/Partnership Model</i>
<b>Computer science</b>	Partnership	Partnership	Participatory design	Engagement Co-creation:consultant	[Ongoing engagement]	None	
<b>Chemistry</b>	Partnership	Partnership	Participatory design	Co-creation:co-researcher	Co-creation: representative	None	

# Models of Open Textbook creation and production

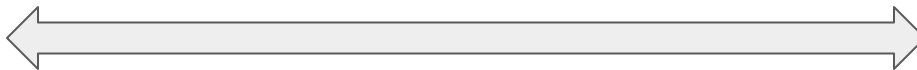
# Collaborative open textbook production models

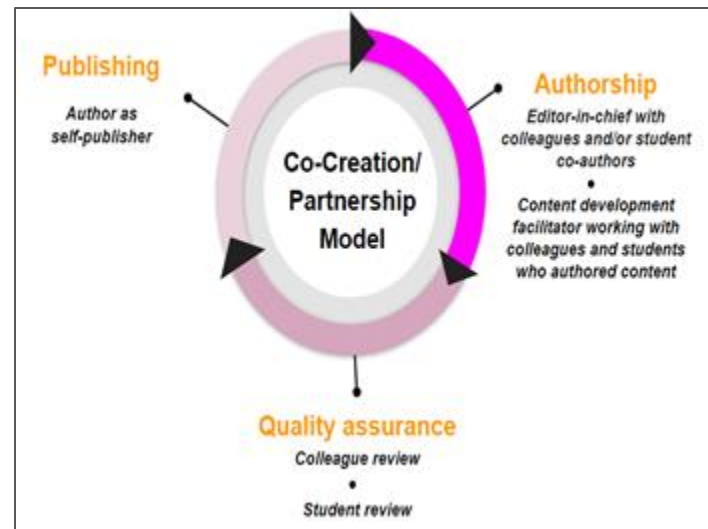
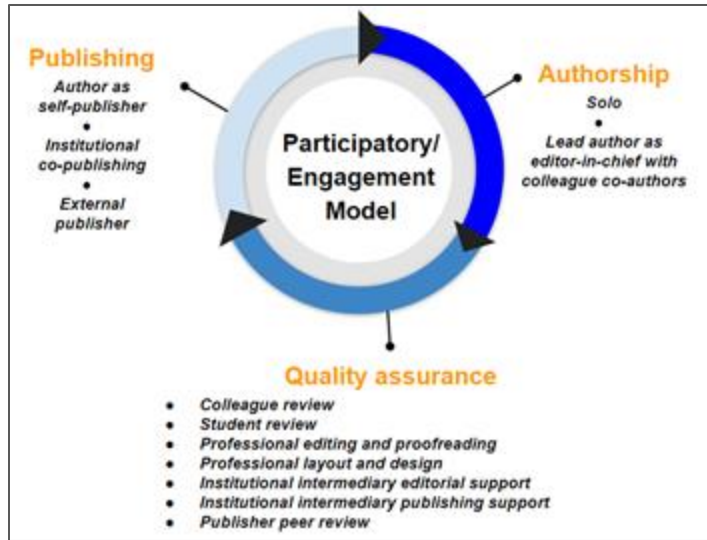
Aim: Provide open textbook creators with sustainable models of production that manifest “parity of participation” as the just end point of social justice

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 voice, power shifts

# 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.



# Students as partners

## Global movement to include (UG) students in course design, facilitation and research

“a collaborative, reciprocal process through which all participants have the opportunity to contribute equally, although not necessarily in the same ways, to curricular or pedagogical conceptualization, decision making, implementation, investigation, or analysis” (Cook-Sather, Bovill & Felten, 2014)

### Different theoretical framings:

- Student voice, agency - critical pedagogies
- Shift of locus of expertise - co-design
- Student engagement literature

**Principles: respect, reciprocity and shared responsibility**

**More recently: attempts to think about power differentials**

**“Promoting Equity and Justice Through Pedagogical Partnership”  
De Bie et al (2021)**



# Current research focus: Interviews with 3 authors and student collaborators

Author 1: Three students (one withdrew): one student worked on designing questions/quizzes for open chapter, another worked on a technical platform (students were **paid** for this work- consultants)

Author 2: Various levels, **whole class participation**, tutors and co-teaching

Author 3: Students made videos (**assignment**) and wrote chapters (invited whole class but not everyone co-creating)

# How do academics experience working with students in OT production (what are the benefits)?

Author 1: “Overall positive”, “fairly freeform” “hands off approach”

Benefits: second and third year students... you have a positive impact to play within the department... you have a real role to play here to improve things, something that we on our own are unable to do.

Author 2: “Satisfying because the students respond really well to the idea”

Benefits “Whole class, same level”...” And I think it's important to involve all of them at the same level because you just get a lot of work out and it's just rich”.

Author 3: It's fantastic. It's very interesting,..

Benefits: they are actually mentoring me a lot more than I'm mentoring the students. They are so inspiring to me because they are on a completely different frequency

# What are the challenges?

Author 1: Strike a balance: 'any time that they spend working on something like this is time taken away from their actual studies.'

'The workload for students is really enormous'

One student didn't contribute: They just felt like the normal bumps along the road that one expects.

Author 2: Group work is always challenging

Author 3: Time pressures on students

“Inclusivity is a key dimension of both social justice and sustainability, in that multiple voices are required in order to achieve more equal epistemic representation”(Cox, Masuku and Willmers 2022a)

Conclusion

# Does open education address underlying structures of dominance and subordination?

Only if it is created and used across the institution and potentially across the country and globally, in order to embrace critical reflexivity and pluralism valuing previously excluded knowledge and legitimising indigenous resources.

Only then will we be “dismantling (of) institutional obstacles” or root causes of systemic injustice that underlie the pursuit of participatory parity present in higher education.

The power of open education lies not only in the **product**: accessible content but especially in the **process**: making the content.

The process includes pedagogical shifts and is an enabler for cultural and political justice.

# A Call to organise open education.....

## What are we organising against?

The current emphasis on market value of HE

(via Neoliberalism)

Technological monopolies (technology is never neutral)

Perpetuating injustices

Racism

Economic exclusion

Competition for gain

## What are we organising for?

- Equity
- Access
- Intersectionality
- Collaboration
- Community
- Voice
- Generosity
- Care

“Open is a gift on offer. Like any gift, it is up to you whether you think it is worthwhile to accept it. We only ask that you consider” (Biswas-Diener & Jhangiani, 2017:6)

# 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



# References

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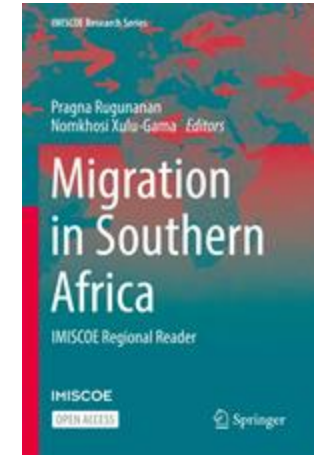
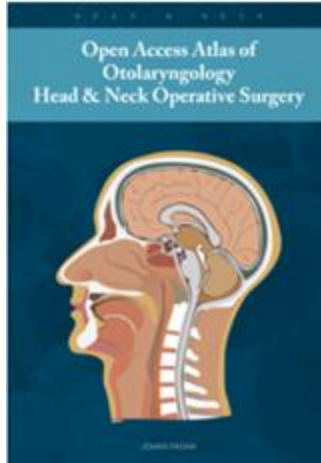
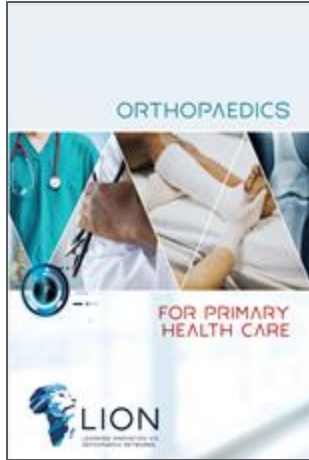
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