

Roots to Shoots: A Holistic Approach to Inclusive Learning Design

Read the introduction below, or choose another format:

Listen to an [Educational Burrito podcast](#) (40 minutes) about the background to my 'roots-to-shoots' approach.

Watch the [Inclusive Learning Design keynote](#) (69 minutes) I gave at the University of Liverpool L&T conference 2021.

Read a [case study](#) about the learning design workshop that I offered for Aga Khan University in 2021. You can also read the [blogpost](#) which summarises the workshop.

Introduction

In the rapidly evolving landscape of education, there is an increasing need to create inclusive learning environments that cater to the diverse needs of students. As the student population grows in numbers and dimensions of diversity, educators must strive to design learning experiences that foster academic, cultural, and social growth for all learners. Unfortunately, there is little *practical* guidance available to university teachers on how to design (and implement) more inclusive learning. Many curriculum design models focus on the learning activities and/or assessment areas but do not centre values, context and evaluation. The pressing need for a more comprehensive, inclusive approach to designing learning environment and experiences has led me to create my own approach called the 'roots to shoots' inclusive learning design approach, which I explain in detail in the book *Inclusive Learning Design in Higher Education – A Practical Guide to Creating Equitable Learning Experiences* ([Routledge](#)).

My roots to shoots approach is an invitation to tackle learning design from the perspective of inclusivity, intentionally, from the start and in all aspects. It is a more holistic, comprehensive way of designing learning, to support every student to thrive. It can be used to design courses and modules from scratch – especially to create its initial overall, big picture – or to refresh or enhance existing courses and modules. It challenges educators to critically assess the inclusivity of their teaching design and practice(s) from the outset, rather than as an afterthought.

Understanding Inclusive Learning Design

This is my working definition of inclusive learning design:

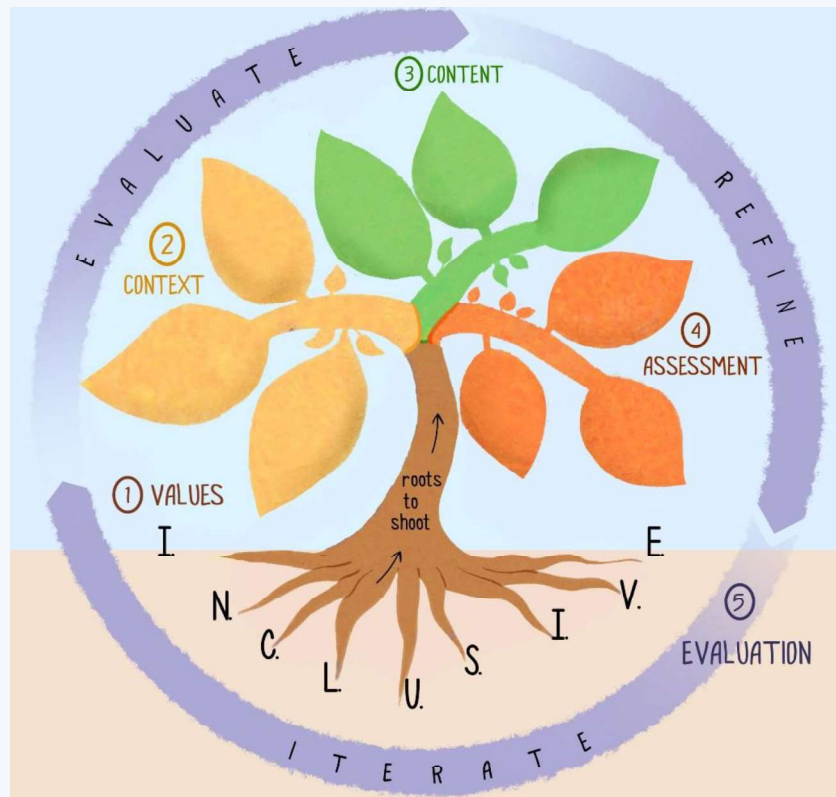
Inclusive learning design is design that considers the full range of human diversity with its complexity. It is designing learning environments, experiences, activities, tasks, assessment

and feedback with students' voice and choice at its heart, so that students can grow academically, culturally and socially.

Inclusive learning design encompasses a mindset and ethos that values each student equally and provides tailored learning opportunities to address their individual needs. In this approach I emphasize the importance of inclusivity as a *signature pedagogy*, transforming it into a hallmark of the university courses you offer or support. The book serves as a guide to help you assess your current practices, understand the process of embedding inclusivity in curriculum design, consider the challenges that inclusivity poses and determine your readiness to implement change.

Exploring the approach: Roots to Shoots

The concept of 'roots to shoots' that underpins the approach is illustrated in a circular path around a symbolical tree with roots and branches to represent five phases or stages of learning design, as shown in the image below: (1) Values, (2) Context, (3) Content, (4) Assessment and (5) Evaluation.



Citation: Rossi, V. (2023) *Inclusive Learning Design in Higher Education – A Practical Guide to Creating Equitable Learning Experiences*. London: Routledge

The approach invites teachers to (collaboratively) consider each of the five dimensions in turn, to form an overall big picture of the learning experience they are designing. Each phase corresponds to a section in the book where it is discussed and exemplified through many international case studies.

Phase 1: Values—the Roots

Main question: Which values inform your (inclusive) design and practices?

The roots of the inclusive learning design tree represent the values that underpin the entire framework. I use the word ‘inclusive’ as an acronym for nine further inclusivity values that should drive the learning design process at every stage:

I. Intentionally equitable

N. Nurturing

C. Co-created

L. Liberated

U. User-friendly

S. Socially responsible

I. Integrative

V. Values-based

E. Ecological

Phase 2: Learning Context—Set up and Engagement

Main question: Which contextual factors inform your (inclusive) learning design and practices?

This phase, represented by the left branch of the tree, delves into the importance of considering the learning context in inclusive learning design by carrying out a *situational analysis*. Educators are encouraged to reflect on the institutional, cultural, and disciplinary contexts that shape the learning experience. But above all, teachers need to answer the questions: Who are my students? Who am I designing for?

By understanding the context, teachers can create supportive systems and engage students effectively.

Phase 3: Learning Content—Input and Practice

Main questions: How can you provide input and practice in a more inclusive way? What are the challenges?

The central branch of the tree represents the learning content, which encompasses the presentation and engagement with key concepts and practices in the discipline. I emphasize the significance of making the content more inclusive through thoughtful presentation and universal design principles. Teachers are invited to identify learning thresholds, opportunities for flipped and self-directed learning, and to make the learning relevant and creative.

Phase 4: Learning Assessment—Outputs and Feedback

Main questions: How can you design more inclusive assessment outputs and feedback? What are the challenges?

The right branch of the tree in the inclusive learning design framework centres around the critical area of inclusive assessment. This phase of learning design explores the design of varied outputs that allow students to demonstrate their learning and receive (inclusive) feedback.

I highlight the need of providing students choice and voice through formative and summative assessments that promote reflection, engagement and growth. Such assessments go hand in hand with meaningful feedback for students, from themselves, their peers and teachers.

By creating inclusive assessment strategies, educators can ensure that all learners have equitable opportunities to showcase their knowledge and skills.

Phase 5: Learning Evaluation—the Outer Circle

Main questions: How will you evaluate your efforts to design more inclusive learning? What are the challenges?

The outer circle of the inclusive learning design approach signifies the ongoing process of evaluation, iteration, and refinement in teaching and learning. This phase is about the significance of continuous evaluation and improvement (through self-reflection and

feedback from students and colleagues) as an essential aspect of effective, inclusive education.

The concepts of evaluation, iteration, and refinement serve as guiding principles for enhancing inclusive learning environments and practices.

Conclusion

My roots to shoots approach provides a comprehensive approach to inclusive learning design to *intentionally* cultivate learning environments where every student feels valued, respected, and empowered to grow academically, culturally, and socially. Through a metaphorical journey from the roots to the branches of the tree and beyond, it challenges educators in creating inclusive learning experiences that cater to the diverse needs of students.

The journey from roots to shoots involves (1) embracing inclusive values, (2) understanding and engaging with the learning context, (3) designing inclusive content, (4) implementing inclusive assessments, and (5) continuously evaluating and refining design and practices. With this comprehensive framework, educators have the tools, guidance and examples to embark on a transformative journey toward more inclusive learning design.

This website is the companion to the book where I explain the roots to shoots approach in detail. It mirrors the book's structure and provides additional case studies linked to the five dimensions discussed above. This website also has:

A discussion of **key terms** such as 'learning design' and 'inclusivity' and why they matter in higher education now.

A useful **checklist** to be used as an aide-memoir for those (re-)designing courses or modules.

A **glossary** of teaching and learning terms (used in the book) to develop shared meaning.

Citation

Rossi, V. (2023) Inclusive Learning Design in Higher Education – A Practical Guide to Creating Equitable Learning Experiences. London: Routledge