

# BACKGROUND NOTES

## A FRAMEWORK FOR APPLIED LEARNING

Applied learning should be seen as an important component of a successful school education ecosystem. It requires effective teaching, supportive school leadership, strong partnerships, and enabling policy settings.

An applied learning ecosystem highlights the relationships and conditions for student-centred learning that is inclusive and promotes positive engagement. It provides a framework for recognising opportunities, tackling challenges, developing realistic goals, and initiating effective plans for sustaining applied learning in school culture and teaching practice.

## WHAT IS AN APPLIED LEARNING ECOSYSTEM?

The concept of a learning ecosystem in education draws on ideas in ecology to show the complex connections and relationships between people, institutions, places, and communities.

**An applied learning ecosystem is created from the dynamic interactions between:**

People – students, teachers, employers, members of the community, policy makers

Places – schools, workplaces, other organisations, community

Ideas – about how students learn, effective teaching, learning by doing.

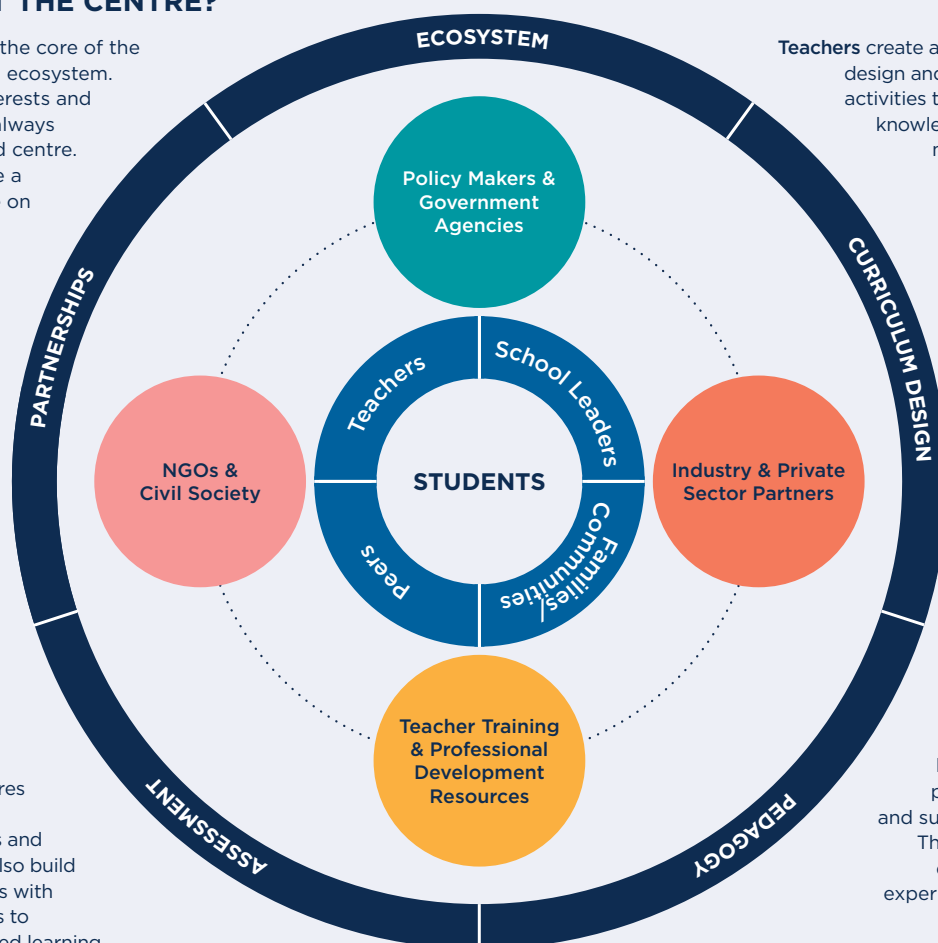
## WHO IS AT THE CENTRE?

**Students** are at the core of the applied learning ecosystem. Their needs, interests and potential must always remain front and centre. Their peers have a strong influence on their learning.

**School leaders** establish and maintain structures that support the work of teachers and students. They also build essential linkages with external partners to strengthen applied learning.

**Teachers** create a safe environment, design and facilitate learning activities that build skills and knowledge. They nurture, monitor and assess students' progress and personal development.

**Families and local communities** provide motivation and support to students. They also contribute expertise, industry experience and learning opportunities.



## CHANGING POLICY, PRACTICE AND ATTITUDES

There are many theories of change that seek to understand how shifts in policies and practice can be achieved in education (Cairney, 2021). Educational change is a highly complex and dynamic process that requires collaborative and iterative approaches (Hecht & Crowley, 2020). School leaders need to clearly understand the opportunities, obstacles, and their sphere of influence within the learning ecosystems so that they can identify the avenues available to them to manage change and effectively implement applied learning.

### STEP 1

The first, most critical step for school leaders is to understand the complex social and cultural attitudes towards applied learning. Across education systems and labour markets globally, academic and applied learning are often positioned differently, even in contexts where applied learning is well regarded (Hoskins et al., 2016). A productive approach is to emphasise the distinctive strengths of applied learning and its role in enriching academic learning. When integrated effectively, applied learning enhances understanding, supports stronger performance, and builds students' confidence and capability.

### STEP 2

School leaders need to articulate clearly to the school community how applied learning complements inclusive education goals by offering diverse ways for students to engage with learning and demonstrate their understanding. India has made inclusive education a major priority. The Indian Right to Persons with Disabilities (RPWD) Act 2016 addresses physical, academic, and teaching material access to education at all levels, from classrooms and laboratories to textbooks and technology aids. School leaders should ensure that all applied learning initiatives and practices are inclusive and compliant with the intent and purpose of the RPWD Act 2016.

The Indian Right to Persons with Disabilities (RPWD) Act of 2016 reflects the spirit of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) and its emphasis on a bio-psycho-social model of disability. The RPWD Act also provides for creation of an enabling social environment which is inclusive and free from negative stereotypes and biases towards persons with disabilities.

Guidelines on accessibility, adaptations and reasonable accommodations have been formulated by various national and state level educational agencies in India. School leaders and teachers should use these guidelines to guide with inclusive design of applied learning. This will minimise the need for subsequent adjustments and ensure that persons with disabilities do not miss out on the opportunities made available through applied learning courses and programmes (see Additional Resource links).

Inclusion is a core principle of this Toolkit, framing each chapter and the design of tools.

### STEP 3

School leaders should instill awareness within the school community about the importance of applied learning in the context of the growing use of both traditional and generative artificial intelligence (Gen AI) in education and work (Nguyen & Tuamsuk, 2022; UNESCO, 2023). As digitisation and automation reshape how work is defined, valued and organised, students are increasingly expected not only to acquire knowledge but to apply it in authentic, complex and technology-rich contexts. Applied learning provides a powerful context for developing this capability, as it emphasises problem solving. Solving problems relies on judgement, collaboration, critical thinking and reflection, which cannot be outsourced to AI.

School leaders play a key role in equipping teachers with the professional capabilities to integrate applied learning across subjects and year levels. This includes guidance on how teachers can promote the thoughtful and responsible use of AI as a learning tool rather than a substitute for learning.

**UNESCO'S FIRST GUIDANCE FOR GENERATIVE ARTIFICIAL INTELLIGENCE:**

- looks into what Gen AI is and how it works, presenting the diverse technologies and models available
- identifies a range of controversial ethical and policy issues around both AI in general, and Gen AI specifically
- discusses the steps and key elements to be examined when seeking to regulate Gen AI based on a human-centred approach – one that ensures ethical, safe, equitable and meaningful use
- proposes measures that can be taken to develop coherent, comprehensive policy frameworks to regulate the use of Gen AI in education and research
- looks into the possibilities for creatively using Gen AI in curriculum design, teaching, learning and research activities
- explores long-term implications of Gen AI for education and research

The full report is available on open access at:

<https://unesdoc.unesco.org/ark:/48223/pf0000386693>

**HOW CAN TEACHERS BUILD PARTNERSHIPS THAT ENRICH STUDENTS' LEARNING?**

When learning extends beyond the classroom, it connects students with the world they are preparing to join (NCF 2005, NCF 2023). Applied learning thrives on collaboration between schools and industries, NGOs, and micro, small, and medium-sized enterprises (MSMEs). These partnerships lay the foundation for authentic, real-world learning, where external partners act as mentors or clients, presenting students with meaningful challenges and feedback.

To make partnerships effective, curriculum design must include structured experiences such as workplace immersions, mentorships and task-based field visits. (NEP 2020). These experiences expose students to professional standards, industry practices and diverse career pathways. They also allow students to test, refine and apply their knowledge in authentic environments that matter.

Establishing and sustaining school-industry partnerships can be complex and time-consuming and cannot be left to teachers alone. This is where an applied learning ecosystem perspective is crucial, with school leaders stepping in to provide strategic and administrative support needed (Perry 2025). See resource 1.5 and the final Partnerships section of this Toolkit.