Rethinking the Way Learning Happens
**Introduction**

The Oak Foundation’s Learning Differences Programme (LDP) believes every student should benefit from engaging and rigorous educational opportunities, and we support solutions focused specifically on students with learning differences, particularly those who experience additional adversity due to racism and poverty.

Advances in cognitive science and neuroscience have provided more understanding than ever about human development, from the science of reading to the link between academic mastery and social and emotional growth. Yet, changes in school organisation and instructional practice are slow to respond to this new information.

Based on interviews with students, families, teachers, and leaders, the LDP identified four attributes we believe are critical to realising our vision of building a world in which schools unlock the creativity and power of students with learning differences – along with every young person – and equip them to shape more just and equitable communities.

1. A sense of **belonging** through strong relationships that promote acceptance, connection, support and empathy in the learning environment;

2. **Mastery through engagement** with rigorous content, demonstration of its understanding, and critical reflection on new material;

3. **Agency** through the capacity and habit to form and act on intentions; and

4. **Purpose** through understanding of personal values and the relationship to learning and long-term goals.
At the same time, the LDP recognises that **metacognition** — the ability to reflect on one’s own thinking and consciously manipulate the cognitive process — undergirds all learning, including that of the four attributes. Together, belonging, mastery through engagement, agency, purpose and metacognition enable students to evaluate their needs as learners and to achieve their personal and academic goals.

Detailed definitions for each attribute follow on the next page. To build out the definitions, our research partners at Public Impact analyzed how the four attributes are reflected in or align with competencies included in the [Harvard Taxonomy Project](#), which maps hundreds of competencies across 40 of the most widely used non-academic, social-emotional frameworks. Whereas the competencies describe specific mindsets, habits, and skills, the attributes are broader, encompassing groups of related, but different competencies. These definitions reflect the LDP’s own interpretations and understanding of the attributes rather than scientific research findings.

We believe that practitioners need to offer students with learning differences responsive and unique learning experiences to fully develop these attributes and their related competencies. To learn about the evidentiary basis for the attributes and implementation strategies, as well as to access a range of other resources, please explore the [Resource Library](#) we developed with Public Impact. In addition, we developed an [Assessment Library](#) to identify metrics and assessments for monitoring student development of the attributes.
Defining the attributes

Belonging
- Building positive relationships
  Ability to establish and maintain positive relationships that convey respect and empathy
- Work with others
  Ability to work effectively with others in a respectful and collaborative manner
- Sociability
  Tendency to seek out and enjoy situations involving interpersonal interactions
- Helping others
  Tendency to care for and offer others help
- Civic identity
  Sense of belonging to and responsibility towards a community or communities with which one identifies
- Positive sense of self
  Favorable self-esteem and feelings about oneself and how others value you

Agency
- Growth mindset
  Belief that one’s abilities can grow with effort
- Self-efficacy
  Belief in one’s abilities to succeed in completing a task, achieving an outcome, or reaching a goal
- Conscientiousness
  Tendency to be organized, responsible, and hardworking
- Initiative
  Tendency to independently take action to achieve desired personal outcomes
- Resilience
  Tendency to recover quickly from adversity and persist
- Leadership
  Ability to lead and organize others
- Self-management
  Ability to recognize and regulate one’s emotions, thoughts, and behaviors to work toward and achieve goals

Metacognition
- Awareness of systems
  Tendency to understand how one fits into a specific context and the corresponding rules and procedures

Mastery through engagement
- Achievement orientation
  Sense of commitment to mastery and success, and belief in one’s ability to reach high standards through effortful, incremental processes
- Creativity
  Tendency to generate and act on novel, original ideas
- Openness
  Tendency to be open and respect new ideas, perspectives, and cultures
- Risk-taking
  Tendency to go beyond established limits
- Access information
  Ability to find accurate, relevant information and apply it effectively
- Critical thinking
  Ability to analyze and evaluate evidence, make connections between information, and strategize on tasks
- Decision-making
  Ability to make choices based on information analysis
- Set and achieve goals
  Ability to set realistic goals and do the action planning necessary to achieve them

Purpose
- Positive sense of future
  Belief in having a place in the world
- Self-concept
  Sense of personal identity, including personal strengths and weaknesses
- Relevance of school
  Belief that subject content in school is interesting or holds value
- Desire to learn
  Tendency to want to learn based on a sense of enjoyment and / or curiosity in learning