Britannica
Project Based Learning

TO BE DESIGNED

Britannica Project-Based Learning (PBL)

ORIENTATION BROCHURE

Dear Educator,

Congratulations on embarking on the Project-Based Learning (PBL) journey for your school!

We are excited to welcome you to a community dedicated to hands-on and inquiry-based learning that empowers learners with the skills to tackle real-world challenges.

PBL transforms classrooms into spaces of creativity, collaboration, and critical thinking. As a facilitator, you'll guide learners through meaningful projects rooted in real-world challenges using the design thinking process.

As you begin, keep these key points in mind:

THINK BEYOND THE TEXTBOOK

Let curiosity lead the way.

FACILITATE

Be a mentor in the learning journey.

CONNECT LEARNING TO REALITY

Align projects with curriculum and real-world relevance.

VALUE THE PROCESS

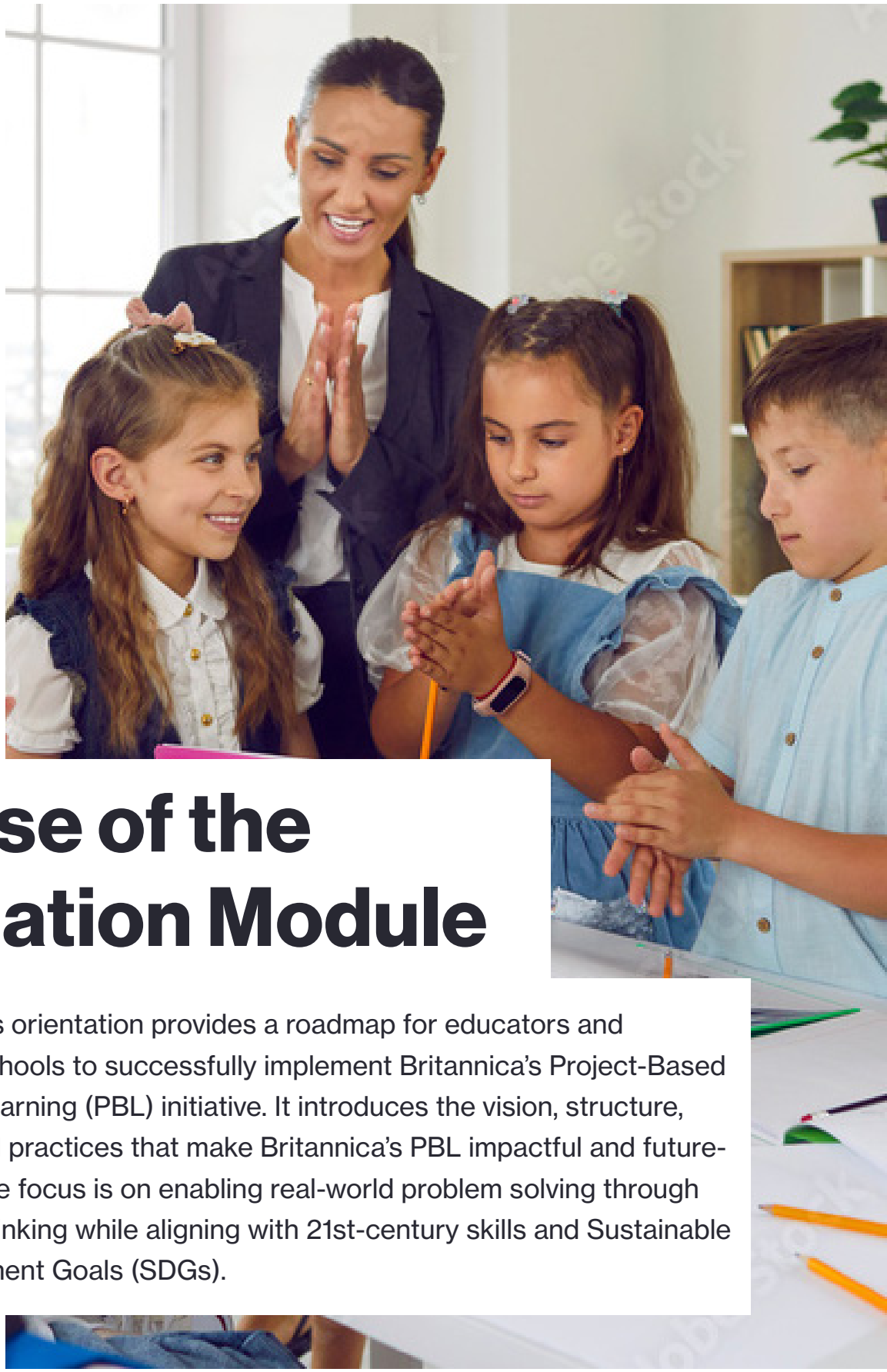
Encourage reflection, iteration, and growth.

We look forward to supporting you at every step of this transformative journey. Together, let's empower learners to become thoughtful innovators, empathetic leaders, and active problem-solvers.

Welcome to the world of Britannica Education's PBL!

Warm Regards,

Academic and Product Team
Britannica Education India



Purpose of the Orientation Module

This orientation provides a roadmap for educators and schools to successfully implement Britannica's Project-Based Learning (PBL) initiative. It introduces the vision, structure, tools, and practices that make Britannica's PBL impactful and future-ready. The focus is on enabling real-world problem solving through design thinking while aligning with 21st-century skills and Sustainable Development Goals (SDGs).

What is Britannica's PBL?

Britannica's Project Based Learning is an experiential, inquiry-based learning framework that empowers learners to explore real-world challenges using the tesign thinking process. Rooted in the context of global issues, the program focuses on the United Nations' Sustainable Development Goals (SDGs), aiming to inspire learners not just to understand these goals, but to actively design solutions that support achieving them by 2030, thereby aligned with the vision of the United Nations and the National Education Policy (NEP).

The approach promotes interdisciplinary learning, cultivates 21st-century skills, and fosters a solution-oriented mindset through a structured cycle: Driving Problem, Focused Investigation, Design Your Path, Sketch to Structure, Launch and Lead, and Creative Display.

Design Thinking Process Lower Grades

The design thinking process in lower grades allows discovery, exploration, and structured learning of mathematics, science, social science, and arts. It is aligned with the guidelines of the NCF Preparatory Stage. The key stages of the design thinking process in this grade are:

1. Real-world connect
2. Explore the problem
3. Plan solution
4. Prototype development and implementation
5. Project culmination

Why Britannica PBL?

21ST-CENTURY SKILLS

Encourages teamwork, divergent thinking, and problem-solving.

BENEFITS DESCRIPTION

INQUIRY-LED LEARNING

Learners ask questions, research, and discover answers themselves.

SDG & REAL-WORLD CONNECTION

Learners solve local/ global issues aligned with the UN SDGs.

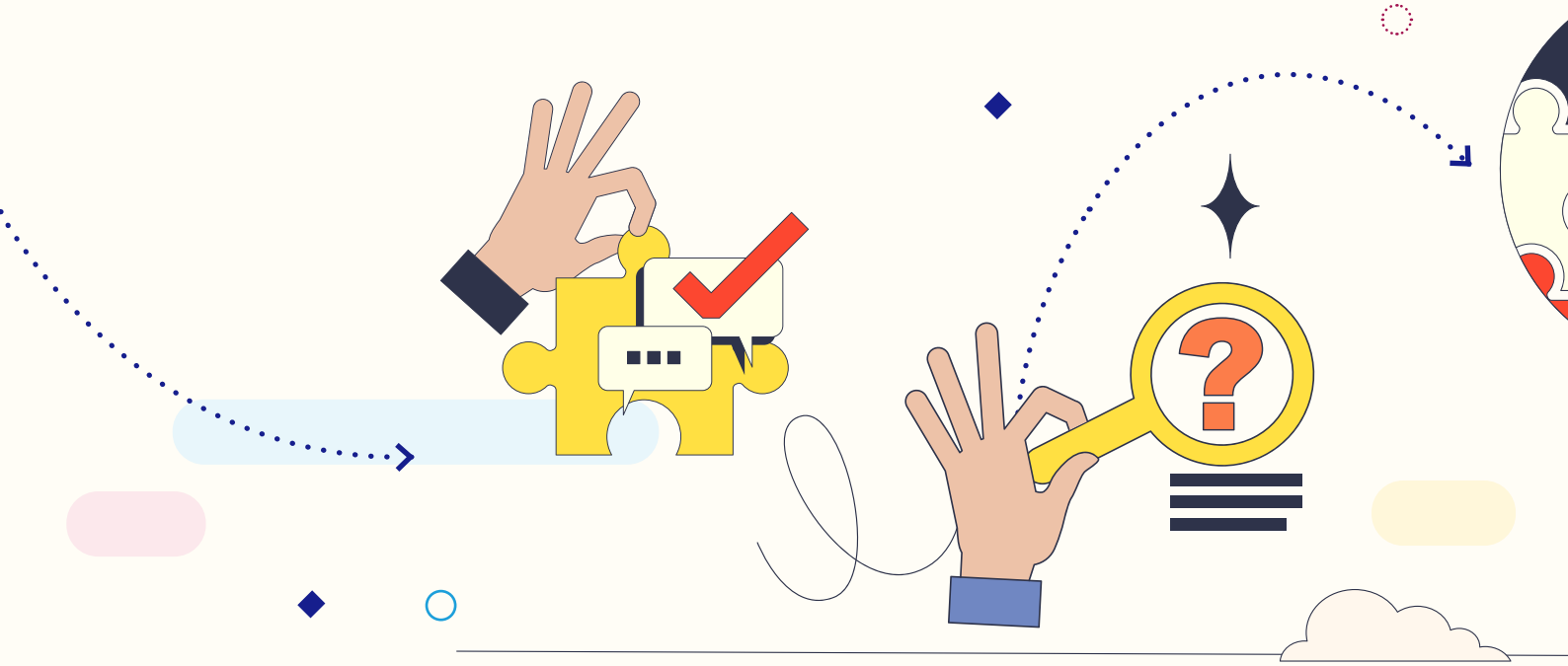
ENTREPRENEURIAL MINDSET

Promotes development of solution, pitching, and reflective learning.

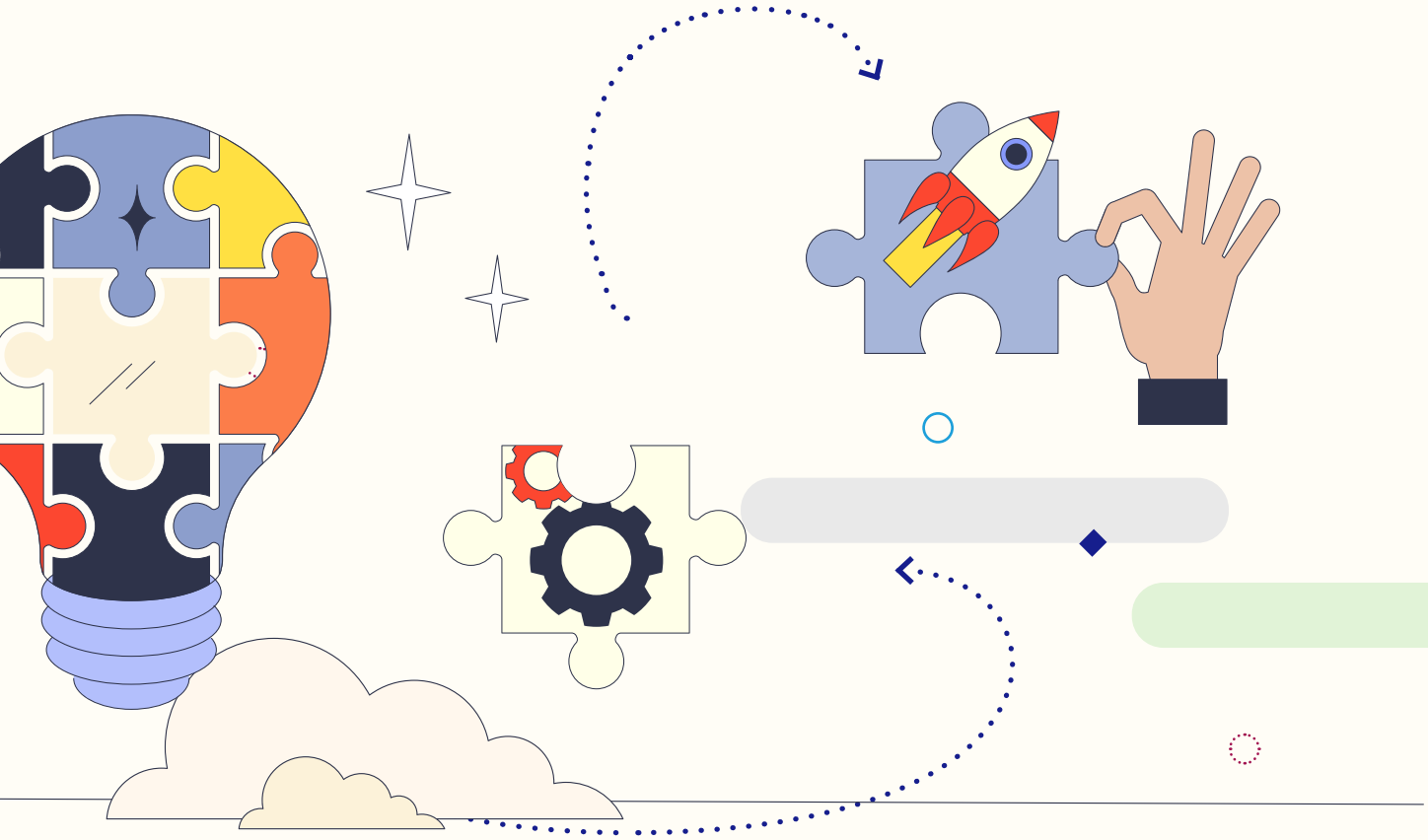
MAKER-CENTERED PEDAGOGY

Learners build products to present their work to the people so as to demonstrate their learning.

Britannica's PBL Process Using Design Thinking



	TEAM FORMATION	REAL-WORLD CONNECT	EXPLORE THE PROBLEM
Design Thinking Stage ▸	**Define roles**	**Driving Problem**	**Focused Investigation**
Educator Role ▸	Build diverse, interest-based teams; assign roles like researcher, presenter.	Guide exploration through real-life scenarios and case studies.	Facilitate secondary research, interviews, fieldwork, survey, observations.
Example ▸	For a clean energy project, the team includes a technology researcher, a community surveyor, and a team leader.	Water Scarcity project, learners examine case studies that highlight how water scarcity affects the daily lives of people in a specific region.	Climate Change project, learners conduct research and surveys, gathering information from various sources such as interviews and journals.



IDEATION AND PLAN SOLUTIONS	PROTOTYPE DEVELOPMENT	IMPLEMENTATION & AWARENESS	PROJECT CULMINATION
Design Your Path	**Sketch to Structure**	**Launch and Lead**	**Creative Display**
Guide in brainstorming ideas and asking questions to explore creative solutions.	Mentor in building working models, and encourage iterative testing.	Support in organizing product launches and leading awareness campaigns.	Support exhibitions, provide feedback and guided reflection.
Plastic Pollution project, learners develop innovative ideas for reusable packaging.	For a Water Filter project learners create a prototype of an affordable water purifier using sustainable, low-cost materials.	Mini Garbage Collector project, learners present a miniature garbage-collecting robot at school.	Public Display During A School PBL Fest: Learners showcase their idea/solution and collect feedback.

PBL's Toolkit

Educators are facilitators, not content deliverers. You're a guide, mentor, and catalyst for deeper learning of learners. To support you in this journey, we've curated a powerful toolkit designed to make facilitation smooth and effective:

PBL Modules: Each PBL module includes a PBL Explorer Guide for learners and a PBL Navigation Guide for educators. The PBL Navigation Guide provides step-by-step instructions and support for effectively facilitating the PBL projects in the classroom. It also includes integrated links to Britannica School and Britannica Library for deeper research. For each PBL, teachers can first select the theme, then download the Explorer Guide, take printouts, and hand them over to each student group to support structured exploration and collaboration throughout the project.

Design Thinker's Journal: A learner's personal logbook to capture thoughts, sketches, questions, research findings, feedback, and iterations throughout the entire project-based learning process.

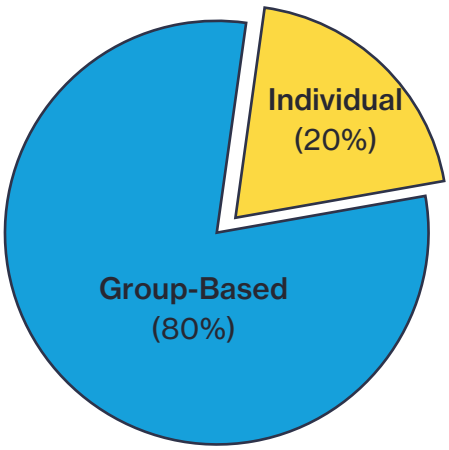
Assessment & Evaluation in PBL

Purpose of Assessment

Assessment in Britannica PBL is continuous, performance-based, and evidence-driven. It supports the learners' growth across multiple domains – cognitive, social and emotional, linguistic and literary, aesthetic and cultural, and moral and ethical – while also recognizing individual contributions.

Assessment Guidelines for Educators

Use the provided rubric to assess various specific criteria. Based on your observations and evidence of learning, tick the checkbox that best represents the learner's level of achievement for each criterion. Ensure your evaluation is consistent, objective, and supported by examples from the learners' work or behavior during the project.



> Assessment is both **group-based (80%)** and **individual (20%)** *(Refer to Design Thinker's Journal, prototypes, presentations, peer feedback, and educator observation notes.)*

Britannica Project Based Learning

PBL Rubric Overview

C—Emerging

Beginning to understand; requires significant support and practice.

B—Growing

Shows basic understanding; needs guidance to improve and apply learning.

	Domain	Assessment Criteria	Description
Group Assessment Criteria (80%)	Cognitive Development	Applies Analytical Thinking	Learners use data, logic, or research to draw meaningful conclusions or solve problems.
	Social & Emotional Development	Demonstrates Collaboration & Empathy	Learners work effectively in teams and respect different perspectives and contributions.
	Linguistic and Literary Development	Shows Creativity, Responsibility, And Problem-Solving	Learners express ideas clearly in oral, written, or visual formats suited to the audience.
	Aesthetic & Cultural Development	Designs Visually Engaging Materials	Learners create materials that are visually appealing and contextually appropriate.
	Moral & Ethical Development	Advocates for Responsible Use of Tools and Resources	Learners propose or take responsible action aligned with ethical values or social good.
Individual Assessment Criterion (20%)	Individual Contribution & Engagement	Shows Creativity, Responsibility, and Problem-Solving	Actively participates, fulfills assigned roles, and contributes meaningfully throughout the project cycle.

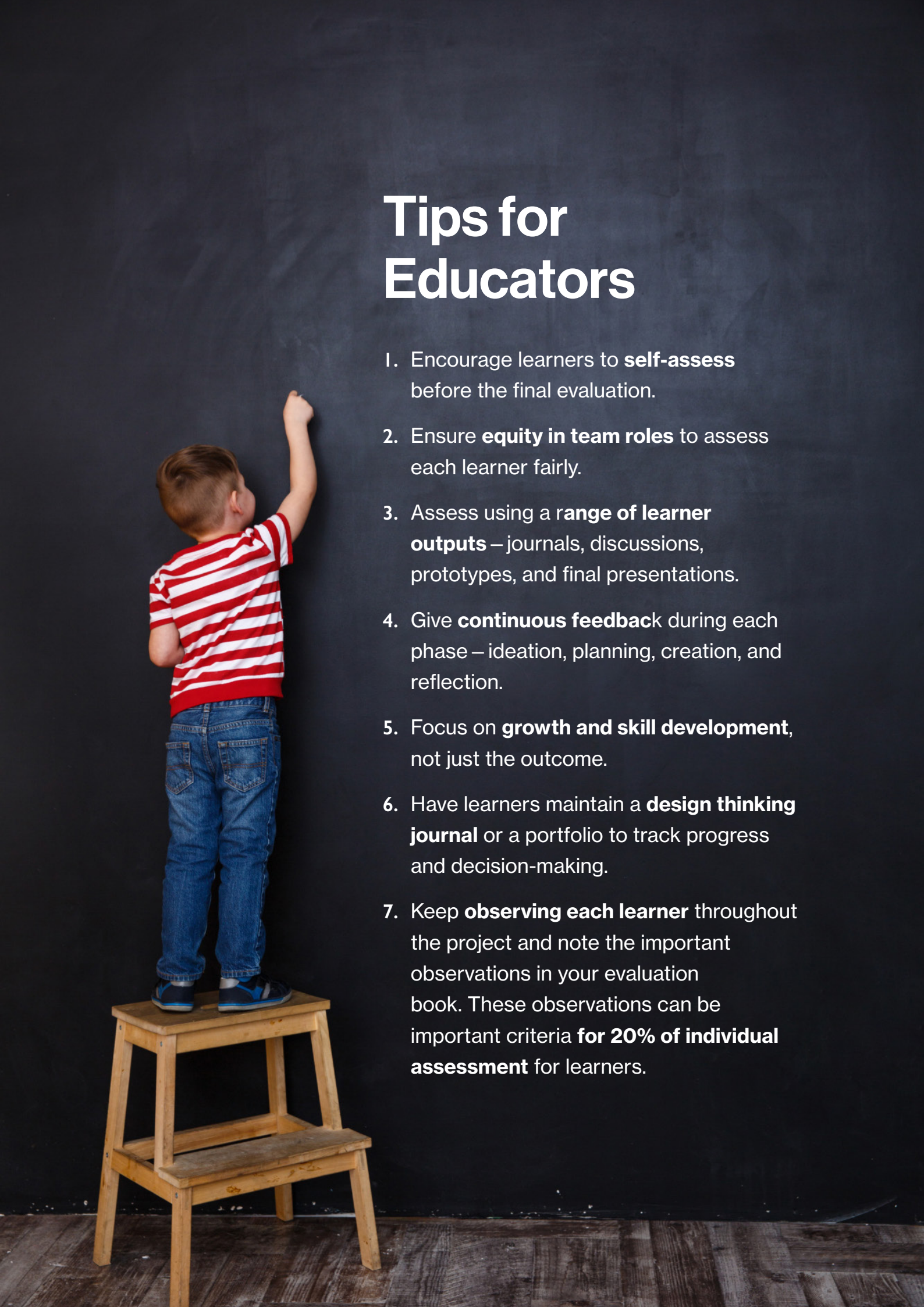
A—Developing

Demonstrates solid understanding and skill; meets expectations with some support.

A*—Thriving

Consistently excels with depth, creativity, and independence; exceeds expectations.

	What to Look For? (Evidence)	C – Emerging	B – Growing	A – Developing	A* – Thriving
	Research Analysis, Data Interpretation, Design Thinking Journal				
	Group Interactions, Peer Feedback				
	Presentations, Reports, Visual Content, Campaign Materials				
	Posters, Infographics, Digital Media, Visual Campaigns				
	Action Plans, Reflections, Campaigns, Feedbacks from Initiatives				
	Participation Records, Task Completion Logs, Reflections, Peer Feedbacks				



Tips for Educators

1. Encourage learners to **self-assess** before the final evaluation.
2. Ensure **equity in team roles** to assess each learner fairly.
3. Assess using a r**ange of learner outputs** – journals, discussions, prototypes, and final presentations.
4. Give **continuous feedbac**k during each phase – ideation, planning, creation, and reflection.
5. Focus on **growth and skill development**, not just the outcome.
6. Have learners maintain a **design thinking journal** or a portfolio to track progress and decision-making.
7. Keep **observing each learner** throughout the project and note the important observations in your evaluation book. These observations can be important criteria **for 20% of individual assessment** for learners.

Time Management & PBL Integration Tips

1. **Number of Projects Per Year**
   Schools can implement a minimum of 1 and a maximum of 4 PBL projects per academic year, aligning them with major themes or curriculum goals. This ensures depth of learning without overwhelming the timetable.

2. **Break the Project into Phases**
   - Break the PBL journey into manageable phases as suggested in the PBL Navigation Guide for each project.
   - Use a visual timeline or tracker in the classroom to monitor progress.

3. **Define Roles & Responsibilities Early**
   Assign learners to functional teams to encourage accountability and allow different tasks to be done simultaneously, saving time. Rotate roles during the project, as needed, to help learners develop a variety of skills.

4. **Maximize Classroom Time**
   - Dedicate 6 focused sessions per m
     tasks.
   - Set mini-deadlines for weekly check-ins to keep momentum.

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5. **Encourage Peer Support**
   - Assign peer mentors within teams.
   - Promote feedback loops during check-ins to enhance quality without the need for micromanagement.

Career Connections & Real-World Readiness

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Every project includes an opportunity for learners to explore careers connected to the skills and the themes they are engaging with. Learners investigate various professions, understand the roles and responsibilities involved, and reflect on the knowledge, skills, and abilities required. This process helps learners make meaningful connections between their projects and potential career paths, fostering early awareness and future readiness.

Annual Calendar for PBL Activities

Phase1

July 2025 – October 2025	
Environment	This theme engages learners in sustainability challenges in the real-world such as upcycling waste, clean-up drives, solar innovations, and green infrastructure. Projects include creating eco-friendly packaging, managing e-waste, conserving energy, promoting biodiversity, composting, and zero-waste lifestyles. Through research, design, and community action, learners develop environmental awareness and problem-solving skills.
Entrepreneurship	This theme encourages to develop real-world business skills by creating and marketing products like pickles, DIY kits, eco-friendly items, and subscription boxes. They explore product design, branding, and sales while learning creativity, teamwork, and financial literacy through hands-on entrepreneurial experiences.
Socio Emotional Learning	This theme supports emotional intelligence, empathy, and social awareness through projects that focus on kindness, conflict resolution, mental health, and community service. They engage in hands-on activities like creating awareness campaigns, fostering relationships, and understanding the impact of media, bullying, and community helpers, all the while strengthening interpersonal skills and emotional resilience.

Phase 2

November 2025 – January 2026	
Artificial Intelligence and Robotics	The theme introduces learners to engineering, mechanics, and text and block coding through hands-on, real-world challenges. Starting with simple machines and craft-based robots in lower grades, learners progress to advanced projects involving sensors, AI, and automation.
Cultural Development	The theme helps to explore and appreciate diverse cultures through engaging projects such as researching monuments, investigating festivals, performing traditional stories, and preserving endangered languages and crafts. These projects promote cultural awareness, empathy, and global citizenship, allowing learners to connect with the rich cultural heritage of India and the world.
Vocational Education	The theme helps to develop practical skills through hands-on projects that blend creativity, craftsmanship, and entrepreneurship. They explore activities like pottery, textile design, paper crafts, and DIY products, while learning about sustainability, financial literacy, and basic business principles. The projects integrate art, science, and vocational skills, empowering learners to create functional items, understand real-world processes, and gain valuable career-ready competencies.

ENVIRONMENT		
Grade	**PBL**	**Description**
3	Reusing Waste Generated at Home	Creatively reuse waste materials to make useful objects, promoting sustainability and waste reduction.
4	School Cleanliness Campaign	Promote hygiene and environmental responsibility through a learner-led cleanup drive.
5	Bicycle Lanes	Propose a bicycle lane by evaluating its feasibility and potential impact, and present findings to local authorities.
6	School Gardening Initiative	Design and build a hydroponic school garden to explore plant growth, sustainability, and urban farming practices.
7	Eco-friendly Packaging	Create prototypes of eco-friendly packaging using sustainable materials, and assess their environmental impact.
8	Urban Green Spaces and Biodiversity	Develop plans for sustainable urban spaces by integrating green infrastructure, biodiversity, and health awareness.
9	Green Infrastructure	Design green infrastructure solutions by researching and proposing innovative ways to integrate nature into urban development.
10	Environment Conscious Citizens (Eco Clubs)	Establish an Eco Club to raise environmental awareness, address local issues, and implement sustainable solutions in the community.
11	Reducing Water Wastage	Develop and implement strategies to reduce water wastage, and raise awareness about water conservation.
12	Plastic-Free Campaigns (Sustainability Advocacy)	Promote responsible consumption by reducing plastic use through awareness drives, sustainable alternatives, and actionable plans.

Britannica
Project Based Learning

Felicitation & Jury Process - PBL Orientation Guide

The Felicitation aims to honour and celebrate outstanding achievements in Project-Based Learning by recognizing excellence across categories such as Best Project (Innovation/Impact), Best Presentation, Most Collaborative Team, Best Research & Analysis, Special Jury Recognition, and Mentors of Excellence. All participants will receive certificates, while winning teams and mentors will be awarded trophies, medals, appreciation letters, and special mementos. Every student participating in the PBL experience will receive a participation certificate, and all educators involved will be awarded certificates acknowledging their engagement with the Design Thinking Process.

The Jury Process features a carefully selected panel comprising internal faculty, external subject matter experts, and optionally, industry representatives. Jury members will receive a structured evaluation rubric and a pre-event orientation to ensure clarity, impartiality, and confidentiality throughout the process.

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The flow includes jury registration a
welcome, orientation, scheduled stu
presentations, deliberation, and result compilation. Evaluation follows a three-stage selection process: School-Level Screening (Top 3 projects per level), Britannica Jury Evaluation (Top 3 per award category), and Grand Jury Round, where one winning project per category is chosen for final recognition at the showcase.

Contact the Britannica Support Team for onboarding, queries, and resources.