

Evaluation & Feedback – Scoreboard

Metric Category	Metric Name	What It Measures (Quantitative)	Formula / Measurement	Unit
Change in Student Interest in STEM	Interest Score Differential (ISD)	Average change in STEM interest rating	Post event mean – Pre-event mean – event mean – Pre-event mean	Points
	Students with Increased Interest	Students whose interest score increased	(Number increased / Total) × 100	Percentage
	Interest Conversion Rate	Students moving from low → moderate/high interest	(Converted / Total) × 100	Percentage
	Interest Stability Index	Students maintaining high interest	(High interest stable / Total) × 100 – interest stable / Total) × 100	Percentage
Engagement Levels during Activities	Participation Rate	Students actively participating in STEM activities	(Participants / Total attendees) × 100	Percentage
	Interaction Frequency	Number of interactions during sessions	Count of questions, comments, inputs	Number
	Activity Completion Rate	Students completing hands-on tasks-on tasks	(Completed / Total) × 100	Percentage
	Attendance Retention Curve	Students remaining engaged over time	% present at 15/30/45 minutes	Percentage
Awareness of STEM Pathways	Pathway Knowledge Gain	Increase in correct answers to STEM pathway questions-pathway questions	Post event score – Pre-event score – event score – Pre-event score	Points
	Programme Understanding Rate	Students scoring above a defined threshold	(Above threshold / Total) × 100	Percentage
	Misconception Reduction Index	Reduction in incorrect assumptions about STEM	Pre-event misconceptions – Post event misconceptions – event misconceptions – Post-event misconceptions	Count
Confidence and Self-Efficacy in STEM	Confidence Score Differential	Change in self reported STEM confidence-reported STEM confidence	Post event mean – Pre-event mean – event mean – Pre-event mean	Points
	Students Reporting Increased Confidence	Students whose confidence increased	(Increased / Total) × 100	Percentage

	Skills Self-Assessment Index-Assessment Index	Perceived ability in STEM tasks	Score on 1 - 5 scale	Points
Teacher and Coordinator Feedback	Satisfaction Score	Overall rating of event quality	Likert	Points
	Curriculum Alignment Score	Perceived relevance to STEM curriculum	Score on 1 - 5 scale	Points
	Recommendation Rate	Teachers willing to recommend the event	Likert	Points
Inclusivity and Reach	Gender Participation Ratio	Gender balance in participation	Female / Male (or other categories)	Ratio
	Under-represented Group Participation Rate	Participation from target groups	$(\text{Target group participants} / \text{Total}) \times 100$	Percent
	Geographic Reach Index	Number of schools/regions represented	Count of distinct locations / regions	Number
	Socioeconomic Diversity Score	Participation from low resource schools-resource schools	$(\text{Low resource participants} / \text{Total}) \times 100$ - $(\text{resource participants} / \text{Total}) \times 100$	Percent
	Inclusivity Growth Rate	Year on year increase in participation from underrepresented groups-on-year increase in participation from under-represented groups	$(\text{This year} - \text{Last year}) / \text{Last year} \times 100$	Percent
Future STEM Actions and Follow-through-Through	Multiple events participation	Repeated participation in HEI STEM events	$(\text{Multiple participation sign-ups} / \text{Total}) \times 100$	Percent
	Website Visit Rate	Change in visits to STEM website pages Y/Y or M/M	$(\text{This year} - \text{Last year}) / \text{Last year} \times 100$	Percent
	Resource Download Count	Change in downloads of STEM materials	$(\text{This year} - \text{Last year}) / \text{Last year} \times 100$	Percent
	Open Day Sign-up Rate-Up Rate	Previously participating students registering for STEM open days	$(\text{Sign-ups} / \text{Total}) \times 100$	Percent
	Newsletter Subscription Rate	Students opting into STEM updates	$(\text{Subscriptions} / \text{Total}) \times 100$	Percent
	Follow-up Engagement Ratio-Up Engagement Ratio	Total follow-up actions per participant-up actions per participant	$\text{Total follow-ups} / \text{Total participants-ups} / \text{Total participants}$	Ratio
	Impact on Conversion Funnel	Participating students who enrol in HEI STEM	$(\text{Participating students enrolments} / \text{Total}) \times 100$	Percent

		programmes (separately measured)		
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