Dimensions of Success

Features of the Learning Environment

Organization

Materials

Space Utilization Activity Engagement

Participation

Purposeful Activities

Engagement with STEM

STEM
Knowledge &
Practices

STEM Content Learning

Inquiry

Reflection

Youth
Development
in STEM

Relationships

Relevance

Youth Voice



FEATURES OF THE LEARNING ENVIRONMENT		
Organization	Materials	Space Utilization
Are the activities delivered in an organized matter? Are materials available and do	•Are the materials appropriate for the students, aligned with the STEM learning goals, and appealing to the students?	•Is the space utilized in a way that is conducive to OST learning?
transitions flow?	appearing to the students:	•Are there any distractions that impact the learning experience?
ACTIVITY ENGAGEMENT		
Participation	Purposeful Activities	Engagement with STEM
•Are student participating in all aspects of activities equally?	•Are the activities related to the STEM learning goals?	•Are students doing the cognitive work while engaging in hands-on activities that help them explore
•Are boys participating more than girls? Are some students dominating group work?		STEM content?
STEM KNOWLEDGE AND PRACTICES		
STEM Content Learning •Is STEM content presented	Inquiry	Reflection
accurately during activities?	•Are students participating in the practices of scientists,	•Do students have opportunities to reflect and engage in meaning-
•Do the students' comments, questions, and performance	mathematicians, engineers, etc.?	making about the activities and related content?
during activities reflect accurate uptake of STEM content	Are students observing, collecting data, building explanations, etc.?	
YOUTH DEVELOPMENT IN STEM		
Relationships	Relevance	Youth Voice
•Are there positive student- facilitator and student-student interactions?	•Is there evidence that the facilitator and students are making connections between the	•Are students encouraged to voice their ideas/opinions?
	STEM content and activities and students' everyday lives and experiences.	•Do students make important and meaningful choices that shape their learning experience?

Overview of DoS Dimensions

