

# Science Teacher Inquiry Rubric

The Science Teacher Inquiry Rubric is a teacher development tool used to achieve the Success Academy Vision of Science Excellence.

## Science Teacher Inquiry Rubric | Worksheet

1 Beginning to Use Inquiry	2 Inconsistent Implementation of Inquiry	3 Teacher-Guided Inquiry	4 Scholar-Led Inquiry
<p>Talks about the Essential Question during class session</p> <p>Authentic practices are absent in lesson</p> <p>Questions lead scholars directly to an answer</p> <p>Misses opportunities to leverage unexpected findings</p> <p>Struggle is unproductive or absent</p>	<p>Inconsistently uses the Essential Question as a storyline</p> <p>Practices are used, but not effectively connected to ideas</p> <p>Questions promote discovery of ideas</p> <p>Acknowledges unexpected findings, but is not always productive</p> <p>Allows for struggle, but not always productive</p>	<p>Consistently uses ideas embedded in the Essential Question as a driving storyline</p> <p>Utilizes scientific practices to drive discovery and mastery of ideas</p> <p>Questions promote discovery of ideas using 5E purpose</p> <p>Nimble with unexpected findings, and uses them productively</p> <p>Valorizes productive struggle</p>	<p>Scholars use the Essential Question to drive their thinking and discourse</p> <p>Scholars use and articulate the science practices to develop their ideas</p> <p>Questions promote discovery of ideas using 5E purpose</p> <p>Nimble with unexpected findings, and uses them productively</p> <p>Scholars embrace productive struggle</p>
			

## Science Teacher Inquiry Rubric | Definitions

### Key

#### ■ Essential Questions (EQ)

are overarching unit questions that provide a cohesive storyline. The Essential Question drives the inquiry process, organizes classroom discourse, and deepens scholars' understanding of important ideas. An Essential Question is more than a sentence written on the wall; it is the central principle for each lesson and unit.

#### ■ Science and Engineering Practices (SEPs)

are methods utilized by scientists and engineers to do their work and build a knowledge base of scientific understanding. Since science and engineering require the use of these practices, it's essential for teachers to understand and effectively implement them. Teachers must engage their scholars in using practices in the road to mastery.

#### ■ Questioning

is at the heart of strong teaching. Effective questions are presented at the right time and are aligned to specific goals of the lesson at hand.

#### ■ Flexibility

The science classroom is an unpredictable environment. Scholars will ask unexpected questions and produce unanticipated findings during their learning journey. Effective teaching leverages the unexpected and teachable moments. By modeling flexibility, teachers help scholars embrace scientific thinking.

#### ■ Culture of Productive Struggle

Learning is not always easy. Teachers must prioritize working through challenges as they guide their scholars.