

Science Education - Program Specific Items - Each academic area assesses five items in addition to the 10 InTASC standards.

Item	Distinguished (4)	(3.5)	Proficient (3)	(2.5)	Emerging (2)	(1.5)	Underdeveloped (1)	Rating	
<i>The teacher candidate...</i>								1/3	2/3
Demonstrates knowledge of and ability to teach the nature of science.	Engages students in creative research and learning experiences that include a variety of scientific methods, and includes science models, laws, mechanisms and theories to explain natural phenomena.	In addition to rating of "3" for performance, partial success at rating of "4"	Engages students in learning experiences that demonstrate a variety of scientific methods, and includes science models, laws, mechanisms and theories to explain natural phenomena.	In addition to rating of "2" for performance, partial success at rating of "3"	Teaches content knowledge to students with some opportunities for engagement in using the scientific method.	With assistance, partial success at rating of "2"	Exclusively lectures as a method to teach science content knowledge to students.		
Models the use of inquiry/scientific method to help students construct science understanding.	Models and engages students in creative experiences that include inquiries where they develop concepts and relationships from their observations, data, and inferences.		Engages students in experiences that include inquiries where they develop concepts and relationships from their observations, data and inferences.		Occasionally engages students in experiences that include inquiries where they develop concepts and relationships from their observations, data and inferences.		Rarely engages students in experiences that include inquiries where they develop concepts and relationships from their observations, data and inferences.		
Promotes student understanding of the science and society relationship.	Provides highly creative strategies that promote student understanding and application of technology, science concepts and processes, and engineering to real world societal problems and issues.		Provides strategies that promote student understanding and application of technology, science concepts and processes, and engineering to real world societal problems and issues.		Occasionally uses strategies that promote student understanding and application of technology, science concepts and processes, and engineering to real world societal problems and issues.		Does not use strategies that promote the application of technology, science concepts and processes, and engineering to real world societal problems and issues.		
Uses student assessment in science to guide/change instruction.	Skillfully uses multiple assessments to impact and measure learning.		Adequately uses multiple assessments to impact and measure learning.		Attempts with varying success to use assessments to promote and measure learning.		Does not use assessments appropriately to promote and measure learning.		
Models safety and ethical behavior in the science classroom/laboratory.	Models and ensures students practice chemical safety, safety procedures and the ethical treatment of living organisms. Has evidence of Flinn Scientific Safety Certificate for the science classroom.		Models and ensures students practice chemical safety, safety procedures, and the ethical treatment of living organisms.		Discusses chemical safety, safety procedures, and the ethical treatment of living organisms with the students.		Does not foresee or discuss concerns related to chemical safety, safety procedures, and the ethical treatment of living organisms.		
<i>*The overall rating will be calculated as an average of the ratings for this standard.</i>								*Rating	
An overall mean score rating will be calculated for the section. If you are not able to make a fair assessment, you may decide to not enter a rating in a specific section.									