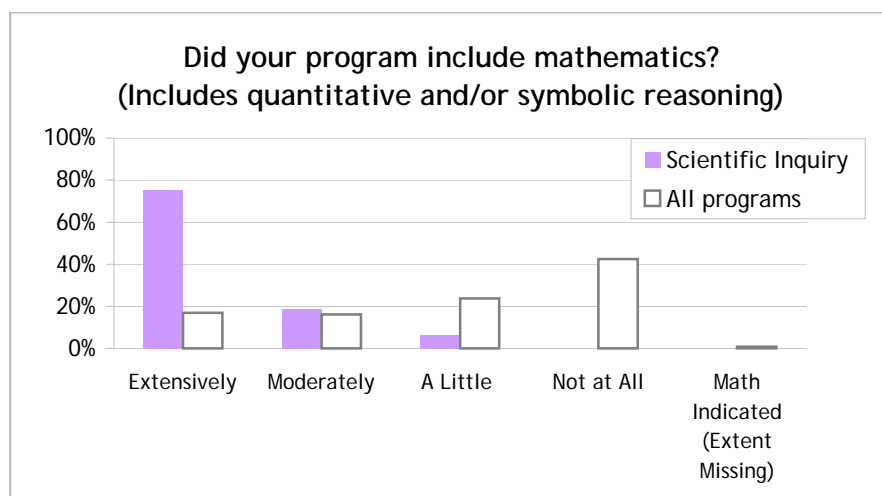


## End-of-Program Review 2006-07

### Mathematics in Scientific Inquiry Programs

Did your program include mathematics? (Includes quantitative and/or symbolic reasoning)

	Extensively	Moderately	A Little	Not at All	Math Indicated (Extent Missing)	Percent of Programs with any Math	Programs with any Math (N)	Programs Responded (N)
Scientific Inquiry	75.0%	18.8%	6.3%	0.0%	0.0%	100%	16	16
All programs	16.9%	16.1%	23.7%	42.4%	0.8%	58%	68	118



Descriptions of programs on next page.

Programs with Mathematics	Extent	Fields			
			Introductory	Intermediate	Advanced
Algebra to Algorithms: An Introduction to Mathematics for Science and Computing	Extensively	Algebra, Geometry	X	X	
Analyzing the World	Extensively	Quantitative Reasoning and Scientific Mathematics	X		
Computability: The Scope and Limitations of Formal Systems	Extensively	Logic		X	X
Computer Science Foundations	Extensively	Discrete Mathematics (8 credits), Computer Architecture (8 credits), Computer Programming (8 credits).		X	X
Data and Information: Quantitative Ecology	Extensively	The program emphasized Statistics, Programming, and Data Analysis.	X	X	X
Environmental Analysis: Chemistry and Geology of Aqueous Systems	Extensively	Statistics, Algebra, Trigonometry, some Calculus, Spreadsheet use		X	X
Industrial Biology and Chemistry	Extensively	Applied mathematics for Advanced Biology and Chemistry, mostly within a laboratory setting		X	
Introduction to Natural Science	Extensively	Pre-Calculus	X		
Mathematics in the History of Science	Extensively	Algebra, Logic	X		
Methods of Applied Mathematics	Extensively	Applied Math -- differential equations, non-linear dynamics, linear algebra, vector calculus. partial differential equations.			X
Motion: Physics and Philosophy	Extensively	Calculus	X		
Physical Systems	Extensively	Vector Calculus (applied to electromagnetism), Advanced Calculus, partial and total differential equations, linear algebra, matrix mechanics (applied to quantum mechanics)			X
History and Philosophy of Biology: Life and Consciousness	Moderately	Logic	X		
Molecule to Organism	Moderately	Logic, Statistics, Data Analysis (ratios/proportions, identification of trends/patterns, and interpreting graphical and tabular data)		X	X
Trace Metals Analysis: Inductively-Coupled-Plasma Mass Spectrometry	Moderately	Algebra, Statistics		X	
Making Milk and Meat: Is Organic Better?	A Little	Statistics.		X	