

Categories of description

Category of Description	Utility of coding	Teaching outcome	Characteristic to moderate	Teaching strategy
Narrow programming	Programming is an important skill	Programming skills	Student work pace	Focus on navigating programming errors
Learning conceptual physics via computation	Computation aids content learning	Physics-code connection	Impact of course design	Leverage affordances of computational problems
Computation as a tool for physics	Computation makes difficult problems easier	Capabilities of computation	Student attention to programming details	Encourage reflection on coding
Shifting perceptions of learning	Computation offers space for broader skills	A new approach to learning	Student attitudes	Leverage collaboration

Outcome space

