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90840-1001. *Choosing a definition of function: Linguistic concerns that impact students.*

Textbook authors and instructors make choices in how they define the concept of function. This study examines the impact of definition choice on undergraduate and graduate student performance, all of whom were mathematics majors. Data are comprised of student work on tasks requiring the application of different textbook definitions of functions. Choice of definition mattered. Indeed, seemingly minor differences in the wording of definitions may affect students' abilities to use the definition and to build a robust concept image of function. By drawing on ideas about action/process vs. object conceptions of function, it is hypothesized that certain linguistic features of definitions may impact a student's ability to use a definition of function and to develop a robust concept image. (Received August 28, 2014)