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Figures and First Years: Examining first-year Calculus I student ability to incorporate figures into technical reports NATHAN ANTONACCI, MICHAEL ROGERS, THOMAS PFAFF, Ithaca Coll — This three-year study focused on first-year Calculus I students and their abilities to incorporate figures into technical reports. Students were handed guidelines as part of their Multidisciplinary Sustainability Education Module meant to aid them in crafting effective figures. Figure-specific questionnaires were added in the class to gain insight into the quantitative literacy skills students possessed both before starting their course and after its completion. Reviews of the figures in 78 technical reports written by 106 students showed repeated failure to refer to figures in discussion sections and use them in evidence-based arguments. Analysis of quantitative literacy skills revealed that the students could both read and interpret figures, suggesting that issues with literacy were not the main contributor to the sub-par graphs.

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