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Science One: University of British Columbia's Interdisciplinary First-Year Science Program

Mathematics plays an important role in interdisciplinary research, and there is a growing need for scientists who can work effectively on quantitative interdisciplinary projects. Starting in 1991, the University of British Columbia Vancouver (UBCV) Faculty of Science has developed an interdisciplinary first-year program called Science One to train new scientists who will be able to tackle problems that require tools from more than one discipline. Mathematics has been a core part of this program. I will present some ideas on the pedagogic benefits and pitfalls of integrating mathematics and science teaching at the university level. As we assess this program, we consider the question: How might we measure the impact Science One has on its students? I will present a brief overview of the qualitative and quantitative evidence that Science One has had a positive impact on students, faculty, and the university more broadly.