Mira Bernstein* (mira@mathcamp.org). “Out of nothing I have created a strange new universe”: the role of summer mathematics programs in the educational paths of talented students.

The quote in the title is from Janos Bolyai, on his discovery of non-Euclidean geometry. It also serves as the motto of Canada/USA Mathcamp, a summer program for mathematically talented high-school students, with which I have been involved since 1997.

Like any residential program, Mathcamp is indeed its own little universe, a world apart. For five weeks every summer, we create a remarkable community, rooted in the thrill of mathematical discovery, the freedom of choosing one’s own intellectual pursuits, and the joy of sharing them with others. For many students, taking part in such a community is a transformative experience: a source of intense happiness and mathematical and personal growth. I am sure something similar happens at other summer programs as well.

As organizers of these mini-universes, we have to ask ourselves: how do we want the students’ experience at our programs to fit into the broader context of their lives, their ongoing mathematical (and non-mathematical) education, and the larger communities of which they are part? And, consistent with this, how should our programs interact with each other, with other math enrichment venues, and with the larger world of education? These are questions to which I do not have answers, but I do have a few thoughts to share. (Received September 17, 2013)