

# Fifty Years of Learning and Sharing For ‘Bright Math Camp’ Facilitator

## Having Children ‘Buy Into’ Curriculum Proved Key to Ottawa Success

Dr. Don Allen developed a distinctive style of Mathematics Enrichment in Montreal classes and after-school clubs from 1958, in Nova Scotia teacher education from 1969, and, most significantly, in parent-supported summers in Ottawa—and others locales—from 1990.

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For Don Allen, program developer (from the start) and long-time presenter at Ottawa’s storied Bright Math Camps, weeks of summer involvement on the Carleton University campus (one-week junior and intermediate sessions for 2008) mark—Don has been surprised to realize—a fall half-century of such esoteric, and professionally rewarding, educational activity.

Five decades ago, he now realizes, Don--somewhat fortuitously--had found himself, on more than one occasion, “in the right place at the right time.”

Having graduated in science (1952) and teacher education (1953)—both at McGill University (Montreal campus)—Don had become well established in the Greater Montreal school system when that board had invited him to be one of six high school mathematics teachers to undertake a “new math” summer on selected university campuses in the United States. This had been the year of *sputnik*, the first space satellites, and “catching up with the Soviets” had become an American priority with funding to match—a right response to a broad area of curriculum concern (mathematics and the physical sciences learning) ... “a right response for the wrong reasons,” some educators might have assessed!

The luck of the draw! Don had been sent to New Brunswick, New Jersey, to the venerable Rutgers University, chartered in 1766 by King George III. Rutgers, as it happened, combined a distinctly strong mathematics department, under Emory P. Starke, with an education school that could attract, in summer and academic year sessions, outstanding classroom and curriculum practitioners--in mathematics, the likes of John Reckzeh and Ernest Ranucci. The close collaboration between subject-matter academics

and school curriculum practitioners is something that most teacher education ventures would aspire to, but to which few, in truth could justly lay claim.

Canadian educated thus far, Don had delighted in the approach and the people (faculty, fellow institute participants, and graduate students) that he had found on the New Jersey campus—the great diversity of education and related course offerings having been combined with remarkably high standards and the opportunity to choose and follow a valid overall program defined in terms of professional and personal development needs.

C. Winfield Scott, highly respected advanced studies director at the education school, showed distinct interest in Don's degree candidacy.

Successive summers on the historic Rutgers campus would culminate in a straight-A masters degree ... the thesis study, years in preparation, an unprecedented study of Quebec mathematics teaching and Canada-wide secondary mathematics content.

You're, quite possibly, less than familiar with two centuries of Rutgers heritage? Think *auromycin*, the early antibiotic. Or look up the very first of intercollegiate football games. Rutgers took on nearby Princeton University, its traditional rival on the sports field. Rutgers won.

Don's first summer of teacher-oriented math "content" 50 years ago had been sponsored by the (U.S.) National Science Foundation (N.S.F.). Such institutes had been set up on American campuses coast to coast—with sufficient "places" for one U.S. secondary math teacher in six to go back to school, many such U.S. teachers having qualified for tuition, room and board, and related government stipends. Don budgeted to attend regular curriculum and instruction coursework ... then would turn again to N.S.F. summer offerings, this time a bit further a field.

University of Santa Clara, California, the distinguished Jesuit campus, oldest university in the American West, had looked favourably on Don's N. S. F. institute, and had welcomed him in June, 1961 ... and in succeeding "content" summers, to the university related Master of Science in the Teaching of Mathematics degree.

Don, to this day, acknowledges particular indebtedness to Gerald Alexanderson, still on staff as Santa Clara mathematics head ... who introduced him to the wholly remarkable George Polya, the octogenarian who personified "heuristics," the fine art of mathematical problem solving. Polya remains accessible through his revered "problem solving" publications. In an unforgettable class session, Santa Clara participants reveled in Polya-style instruction—from the master himself. "Guessing is good," Polya had said at one point, inviting conjectures "Believing your guesses, that not always so good," he had added, as the group reached unanimity on a conclusion--an "evident" analogy—that the great teacher demonstrated to have been false.

Such an experience can be unforgettable, and Don recalls it even as Math Camp participants conjecture ... and seek truth.