Faculty of Arts and Science, University of Toronto

Faculty Council Memorial Resolution

Memorial Resolution for **Professor Walter Warwick Sawyer** (1911-2008)

BE IT RESOLVED THAT the Council of the Faculty of Arts and Science deeply regrets the death of Professor Emeritus W. W. Sawyer of the Department of Mathematics and the Faculty of Education at the age of ninety-six.

Walter Warwick Sawyer died on February 15, 2008 in Toronto. He joined the University of Toronto in 1965 as a joint appointee of the Department of Mathematics and the College (now Faculty) of Education and retired in 1976.

In the mid-1960s, Professor Dan DeLury, then head of the mathematics department at the University of Toronto sought a larger role for his department in the vigorous debate that was then in progress about mathematics education in the schools. To this end, he arranged for two joint appointments in mathematics and education, those of Kenneth O. May and Warwick Sawyer. While Professor May joined the Institute for History and Philosophy of Science and Technology at its foundation, Warwick Sawyer remained attached to the College of Education, giving a highly regarded course to teachers-in-training, as well as teaching within the mathematics department and operating weekly mathematics clubs for school students in the neighbouring areas.

Professor Sawyer was born in the United Kingdom on April 5, 1911, was educated at Highgate School in London (an institution dating back to the reign of Elizabeth I) and took his BA at St. John's College in Cambridge in 1933, where he specialized in relativity and quantum theory. From 1935 to 1937, he was an assistant lecturer in mathematics at University College, Dundee and then held the same post from 1937 to 1944 at Manchester University.

From 1945 to 1947, he was head of the mathematics department at the Leicester College of Technology. While he was there, he studied how mathematics was applied in industry, and developed methods by which engineering students could learn mathematics through handling physical objects. In 1948, he became the first head of mathematics at the University of the Gold Coast (now University of Ghana), where he remained until 1950. From 1951 to 1956, he lived in New Zealand as a lecturer in mathematics at Canterbury University College. Then followed a period in the United States of America, first as a visiting associate professor of mathematics at the University of Illinois for the year 1957-1958, and then as professor of mathematics at Wesleyan University in Middletown, CT. until 1965. While he was in Connecticut, he undertook to introduce mathematics directly to the young; during the year 1958-1959, he regularly taught eleven-year-olds in public elementary schools in Middletown.

He moved to the University of Toronto in 1965 and remained until his retirement in 1976, when he moved to Cambridge. For the next twenty years, he met regularly with about five or six students aged about fourteen on Saturday mornings. He eventually returned to Toronto to be near his daughter, and died on February 15, 2008 at the age of ninety-six.

He was an Honorary Life member of the British Mathematical Association, a Fellow of the Institute for Mathematics and its Applications, and a member of the Edinburgh Mathematical Society, Cambridge Philosophical Society, Canadian Mathematical Society and the Ontario Association for Mathematics Education.

Warwick Sawyer was an extraordinary individual who was very much his own master. He was an independent thinker who was not part of any school of thought and who avoided bureaucratic entanglements, preferring to make his influence felt through the students he encountered, the books he published and the colleagues who respected him. In his dissemination of mathematics, he sought to make it intelligible to both the general public, as well as to students, who too often tended to take a formulaic view of the discipline. Long before it became common to do so, he produced books to this end that have stood the test of time and are still popular, witness the many translations.

One publication, long buried, in which his philosophy of education played a role, is a report commissioned by the Ontario Curriculum Institute (a precursor of the Ontario Institute for Studies in Education) that proposed a geometry curriculum for the schools. Under the chairman of George Duff of the University of Toronto, the nine committee members including H.S.M. Coxeter and Warwick Sawyer produced in 1967 a document that was coherent, comprehensive and progressive. It sought to found the teaching of geometry on the direct physical experiences of the students.

He was the author of ten books. The earliest, *Mathematician's Delight*, published in 1943, has become a classic and has been translated into at least ten languages including Chinese and Japanese. His final book, *An engineering approach to linear algebra* published by Cambridge in 1972 and since translated into Japanese arose out of his innovative approach to a linear algebra course for Toronto engineering students.

Warwick Sawyer is survived by one daughter, Anne Leon; his son-in-law is Professor Emeritus P.R. Leon, of the Department of Spanish and Portuguese.

Be it further resolved that this resolution be inscribed in the Minutes of the General Committee of Council, and that a copy of this resolution be transmitted to the daughter of Professor Sawyer.