

## MEMORIAL RESOLUTION

### LAWSON H. HUGHES

(March 12, 1921 – June 12, 2006)

Lawson Hill Hughes was an associate professor emeritus in the School of Education, department of Instructional Systems Technology (IST). He was born in Tennessee in 1921 and died in Bloomington in 2006 at age 85. He had been retired from his teaching position since 1986.

He was the son of Lawson Hill Hughes Sr., and Fannie McLean Jarmon Hughes of Dyersburg, Tennessee. He began his academic career studying electrical engineering at the University of Tennessee from 1939 to 1942. He joined the US Army Air Corps during World War II, making use of his electrical engineering knowledge by working with aircraft warning equipment. After the war he returned to the University of Tennessee in Knoxville to complete his undergraduate degree, but changing his major to psychology, receiving the BA degree in 1948.

Hughes came to Indiana University to pursue a doctoral degree from 1948-49 and 1952-56, completing his PhD in experimental psychology in 1956. During his doctoral studies he served as a research assistant and associate instructor. He was proud of the fact that he held an assistantship under Prof. William K. Estes, one of the founders of modern mathematical psychology, who was later awarded the US National Medal of Science by President Clinton. In the latter part of his doctoral studies he also worked closely with Prof. Jim Dinsmoor, and together they published early influential articles on operant conditioning, including "Training rats to press a bar to turn off shock" in the *Journal of Physiological Psychology* in 1956. He did the first laboratory study with humans concerning superstition as a learned behavior.

Following completion of his doctorate, he joined the psychology faculty at Coe College in Cedar Rapids, Iowa from 1956 to 1961. He then became an engineering psychologist at the Martin-Marietta Corporation, recently formed as a major player in aerospace engineering. His work was generally related to the design of multi-man space vehicles. An unusual task handed him at Martin-Marietta was the design of a space research facility for studying the effects of radiation on the behavior of a number of animal species.

He joined the Indiana University faculty in 1962 as a research associate in the Audio-Visual Center (AVC) research department, having been identified by L.C. "Ole" Larson, the founder and director of the AVC, as a person who could provide leadership in the area of

applying behavioral psychology to the design of learning environments. This was at the time that teaching machines and programmed instruction were making an impact in education and transforming the field of audio-visual education into its eventual identity as instructional technology. From that time he was continually involved in research on the learning process.

Hughes established the first experimental laboratory in the AV Center where learning could be studied under carefully controlled conditions, and he always managed to have some kind of laboratory in operation, even if “only in a broom closet.” In the 1960s and 70s he was responsible for larger scale laboratory projects in connection with a training program funded by the US Office of Education. He went on to receive a number of competitive research grants, to sponsor student research for which grants were received, and to encourage his students to present their findings at national conferences.

In the 1970s and 80s Hughes conducted basic research on time-compressed speech, particularly regarding the effects of redundant pictures on the comprehension of compressed speech. He directed 20 dissertations related to compressed speech and learning while publishing his own research in education and psychology journals. During this period he was a member of the board of directors of the Center for Rate Controlled Recordings at the University of Louisville. In conjunction with the Center he was active in planning national conferences, screening papers, chairing research sessions, and presenting his own research at regional and national meetings.

He had a half-time appointment in the School of Education in the department of Instructional Systems Technology (IST) as did over a dozen other AVC research associates. He inaugurated a sequence of doctoral courses on research methods in instructional technology in 1962, which he continued to teach until his retirement 24 years later. He also taught a course on programmed instruction for many years.

As a teacher, Hughes always encouraged his students to put into practice what they were learning. In his programmed instruction course his students produced and empirically tested their own programs, and in his advanced research methods course they designed, carried out, and reported an original piece of research.

He directed some 65 dissertations and served as member on many other doctoral committees, in which he was typically called upon to serve as guru on experimental design and statistical analysis. As colleague Prof. Bob Appelman summarized: “He was definitely one of the cornerstones of our research focus for many, many years.” Over the years he developed a reputation as a skilled and patient mentor on the writing of research reports. Another colleague, Prof. Ted Frick remembered: “I recall most vividly the significant amounts of time Lawson would spend with students on their dissertations. He was very patient in helping them

write more clearly and precisely. He was always asking basic questions, very Socratic in his method. The end result was always a clearer sentence with fewer words. Ever since, when advising dissertation students, I often repeat Lawson's advice: 'Try to keep it under 75 pages. You can do that if you write it well. That's what Lawson Hughes used to say.'"

Even after his retirement in 1986, he continued for another dozen years to actively mentor dissertation writers, especially international students. It made no difference whether he was formally related to the student; if a student needed help they knew they could always go to Dr. Hughes and he would help in an unfailingly courteous and patient way. As one international alumnus put it, "Half the international students who received doctorates in IST owe their completion to Dr. Hughes." Prof. Jim Pershing recalls that Hughes carried on an extensive correspondence with former students, especially international alumni, serving as a major link between the University and alumni. His office was decorated with pictures of his correspondents and their growing families, in which he took great delight.

In addition to his professional career, Prof. Hughes found time for many personal pursuits. For many years he and Prof. Jim Knowlton carried on a vigorous chess competition over the lunch hour. After Jim retired, Lawson continued chess games with others via computer. He played the piano and, as a student, played clarinet in marching bands, which began a life-long passion for jazz. He played tennis and was an enthusiastic sports fan, a talented amateur photographer, a fly-fisherman, and a keen birdwatcher. He was dedicated to preserving wild spaces through organizations such as the Nature Conservancy and planted hundreds of trees on the family's land.

In recognition of Lawson Hughes' contributions to the university, the profession and the world around him be it resolved that this resolution be made part of the minutes of the Bloomington Faculty Council and that copies be sent to his wife Joan Simmons Hughes and his sons Dale and William Hughes, all of Bloomington, and to his daughter, Sharon Hughes, of Ellettsville.

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