

McFARLAND, Dora. April 18, 1895–November 26, 1987.

MONMOUTH COLLEGE (BA 1916), UNIVERSITY OF OKLAHOMA (MA 1921), UNIVERSITY OF CHICAGO (PhD 1936).

Dora McFarland was born near Aledo, Illinois, the first of two children of Nell (Blayney) (1868–1912) and Edmund Curry McFarland (1866–1938), natives of Illinois who married in 1893. In 1900 this farm household also included a son, James Russell (b. 1897); Edmund McFarland's father; and a boarder.

Dora McFarland attended grade school and high school in Aledo, a small town in the northern part of the state near the Mississippi River. She then attended nearby Monmouth College. After her graduation from college in 1916, she taught in high schools for a number of years: in Gravity, Iowa, 1916–17; Aledo, Illinois, 1917–19; and Sterling, Illinois, 1919–20.

In the summers of 1919 and 1920 McFarland took classes at the University of Oklahoma before completing her work for her master's degree in 1921. She joined the faculty there as instructor in 1921. Except for the years she was in residence at Chicago for her doctoral work and for leaves, McFarland remained at Oklahoma the rest of her career. She was instructor 1921–27, assistant professor 1927–39, associate professor 1939–48, professor 1948–65, and emeritus professor after her retirement in 1965 at the age of seventy.

McFarland attended the University of Chicago for four quarters beginning in fall 1924 while on leave from Oklahoma. While on a sabbatical in 1928–29, she returned to Chicago on a fellowship for four more quarters. She also took courses in spring and summer 1936 and finished her dissertation in division algebras as a student of L. E. Dickson. She joined the AMS shortly after receiving her doctorate in 1936 and remained a member the rest of her life.

In addition to teaching, which was her main contribution at Oklahoma, McFarland did committee and administrative work and sponsored student organizations. During the 1930s and early 1940s she often served as an officer or sponsor of the Oklahoma chapter of Pi Mu Epsilon, and in 1945–46 she served as chair of the Oklahoma Section of the MAA. In the mid-1950s she contributed to a series of tape recordings made by members of the faculty and sold under the name "Tapes for Teaching." McFarland's contribution was "What should a high school student expect from mathematics?" She also ran several summer institutes for school mathematics and science teachers. Much of her teaching at the University of Oklahoma was in mathematics education. In the early 1960s, she and Eunice M. Lewis, a colleague in the education department, produced notes for an introductory course on arithmetic for elementary teachers; in 1966 they published a more comprehensive textbook for the same audience. In a review in *Choice* magazine, the book was compared favorably with the National Council of Teachers of Mathematics' 29th Yearbook, *Topics in Mathematics for Elementary School Teachers*, and was "highly recommended" (4 (1967): 712).

McFarland was active in a number of organizations not related to mathematics. She was an elder in the Presbyterian church; was a member of the national board of the YWCA; and was the Oklahoma founder, president, and international first vice president of Delta Kappa Gamma, an honorary society for women in education. She was also a member of Kappa Alpha Theta social sorority and in the early 1960s described herself as a Democrat.

McFarland was a recipient in 1949 of the Matrix Table award given by Theta Sigma Phi (now Women in Communications, Inc.). In 1953 she was presented with the \$500 University of Oklahoma Foundation teaching award that “was made for ‘extraordinary excellence in student counseling and teaching of freshman and sophomores’” (*Amer. Math. Monthly* 61:66). In 1960 she received the Delta Kappa Gamma International achievement award. Gamma State, the Oklahoma state organization of the Delta Gamma Kappa Society International, now offers a Dora McFarland scholarship for one year of graduate study to a member of the society who is a resident of Oklahoma.

McFarland took her last leave in the fall of 1959 to take a trip to India and Southeast Asia. Dora McFarland was living in Norman, Oklahoma, at the time of her death at age ninety-two in 1987. She was survived by a niece, two nephews, and several great-nieces and great-nephews.

Organizational affiliations: AMS, MAA, AAUP, Phi Beta Kappa, Sigma Xi, Pi Mu Epsilon.

Dissertation:

1936 Division algebras defined by non-Abelian groups. PhD dissertation, University of Chicago, directed by Leonard Eugene Dickson. Private edition, distributed by the University of Chicago Libraries.

Publications:

1963 with E. M. Lewis. *Arithmetic for Elementary Teachers: An Introductory Course*. Norman, OK: University of Oklahoma.

1966 with E. M. Lewis. *Introduction to Modern Mathematics for Elementary Teachers*. Boston: D. C. Heath. Reviews: *Amer. Math. Monthly* 74:891 (Telegraphic Review); *Choice* 4:712; *Math. Gaz.* 52:292–93 (M. Hayman). Reissue and 2nd ed.: 1968 and 1973 as *Introduction to Modern Mathematics*. Review: *Amer. Math. Monthly* 81:539 (Telegraphic Review, S. Galovich).

Abstract not listed above:

1937 Associativity conditions for division algebras defined by non-Abelian groups of three generators. *Amer. Math. Monthly* 44:343 #3. Presented to the MAA, Tulsa, OK, 5 Feb 1937.

References to: AmMSc 4–8, 9P–11P; AmWom 1935–40; WhoAmW 1–2.

“Dr. Dora McFarland.” (Obituary) unidentified newspaper clipping.

Other sources: PhD dissertation vita 1936; Owens questionnaire 1937; communications with University of Oklahoma Western History Collections and the Office of the Senior Vice President and Provost; US Census 1900, 1910, 1920 IL, 1930 OK.

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