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Science Teacher Certification

State departments of education hold legal responsibility for teacher certification. In granting certificates, a state certification officer, in some instances, administers state laws and, in others, requirements set up by a state board of education or committees appointed by and advisory to the state education department. Until recently academicians have had no prominent place on these advisory committees. There is justification for the criticism that most certification requirements provide for adequate preparation in professional education but not in major specialization.

The National Council for Accreditation of Teacher Education (NCATE), affiliated with the National Commission on Accrediting, accredits teacher-education programs of colleges, requiring that the college first be accredited by the regional association, such as the North Central Association, and asks that states grant certificates to graduates of teacher-education programs of NCATE-approved colleges. Several states follow this practice but apply state standards for certificates in special areas.

As a first phase of the teacher preparation-certification study, sponsored by the National Association of State Directors of Teacher Education and Certification (NASDTEC), with the cooperation of AAAS [*Science* 130, 1237 (1959)], four regional conferences—in Chicago, Salt Lake City, Atlanta, and New York—have been held in which preliminary recommendations of guidelines for teacher certification in science and mathematics were made. Participants included scientists, certification officers, and representatives of teachers colleges and public schools. In these conferences scientists expressed their point of view to certification officers in 47 states. The Garrett report [*Science* 131, 1024 (8 Apr. 1960)] was highly influential in the formulation of recommendations. Certification officers demonstrated their desire to establish standards for science teacher certification much as scientists wish them to be. For example, the mathematicians recommended four courses in mathematics for the prospective elementary teacher, and certification officers supported them. It is rare, at this time, that even one course is required.

The guidelines to be prepared in the NASDTEC-AAAS study are for use by the several states in approving teacher-education programs in science and mathematics. If the study is successful, state departments of education will be advocating programs which have been developed cooperatively with scientists in the various scientific-society and curriculum projects. A college scientist may find himself to be less up to date than the certification officer in his state! At the annual meeting of NASDTEC in San Diego, 19–20 June, further consideration will be given to the regional conference recommendations. Subsequently, in the four-day San Diego conference of the National Commission on Teacher Education and Professional Standards, cosponsored by AAAS, NAS-NRC, and the American Council of Learned Societies, scientists and educators again will work together in planning improved teacher-certification programs.

Several scientific societies have studied proposals for accreditation or for recognition by them of secondary school teachers. Now some educationists are suggesting that the scientists do this. Serious study of such accreditation is called for. The NASDTEC-AAAS study recommendations will be reviewed in the 50 states in the coming year. It is essential that scientists take a very active part in these state deliberations. The leadership which scientists want from state departments of education can be obtained only if scientists are willing to give time to this important work.—JOHN R. MAYOR, AAAS