

Hood Mathematics and Teaching Certification

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Introduction

This is an investigation into the history of the education certification for teachers at Hood College with special attention given to the training of mathematics teachers in the secondary school. In general, to qualify for most professional teaching, administrative, and other public school positions, an individual is required to earn a certificate or license. A certificate does not guarantee employment, but rather grants eligibility for employment to its holder. Certification requirements for prospective teachers vary by state. These requirements may include a college degree with minimum credit hours in a particular field of study, evidence of job experience, good moral character, U.S. citizenship, signing of a loyalty oath, and a minimum score on a basic skills test.

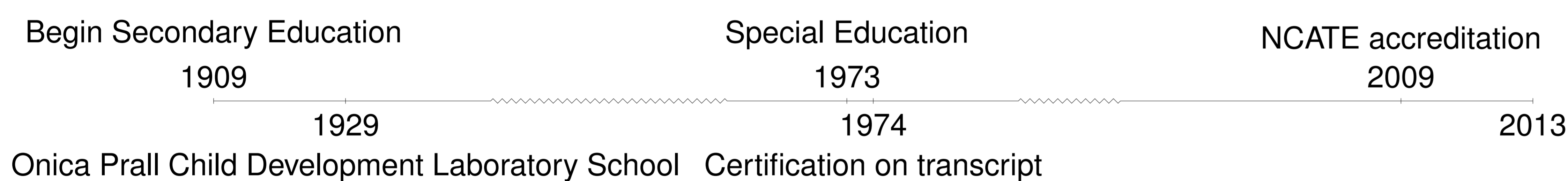
Milestones in Hood Education

- 1909, Secondary education school teaching became a course of study at Hood College.
- 1926, Hood changed its course numbering scheme to the familiar 100, 200, 300, etc. organization method. Prior to then, courses in a department had been denoted by a single digit. For instance, History of Education had course number *Education 1*.
- 1929, Onica Prall Child Development Laboratory School was established at Hood College, a facility for the advancement of early childhood education.
- 1973, Hood added Special Education to their list of education programs.
- 1974, The certification in teaching is now recorded on the holder's transcript.
- 2009, Hood College earned NCATE accreditation.



Figure : Onica Prall, founder of Onica Prall Child Development Laboratory School

Time Line



Current Requirements for the Secondary Education Program

- The current Hood College Education Department requirements for all in the teaching certification program include:
- A baccalaureate degree from Hood College or another accredited institution.
 - Completion of a major in one of the academic fields in which Hood offers secondary teacher certification.
 - Completion of additional general education requirement courses as specified by each department at Hood. For Example, Math majors must also take MATH 336, MATH 304, MATH 320, and MATH 335.
 - Attainment of a 2.75 cumulative G.P.A., a 2.75 G.P.A. in education courses (with no grade lower than a C) and a 2.75 G.P.A. in the respective content area.
 - Attainment of state minimum scores on all state required Praxis I tests (or SAT/ACT equivalent) prior to entrance into Phase I of the teacher certification program.
 - Satisfactory assessment of entry and exit folios.
 - Satisfactory evaluation of professional development school (PDS) field experiences.
 - Successful completion of Praxis II for program completion.



Figure : Jennifer Cuddapah, Coordinator of the Undergraduate Secondary Education Program

Breakdown of Students in Math Education

The following is a chart illustrating the number of Hood students who were enrolled in *Teaching Mathematics in Secondary Schools* from 1958 to 2012. However, *The Teaching of Mathematics in Secondary Schools* has been a course offered as far back as 1924.

Number of students in Math Education by year

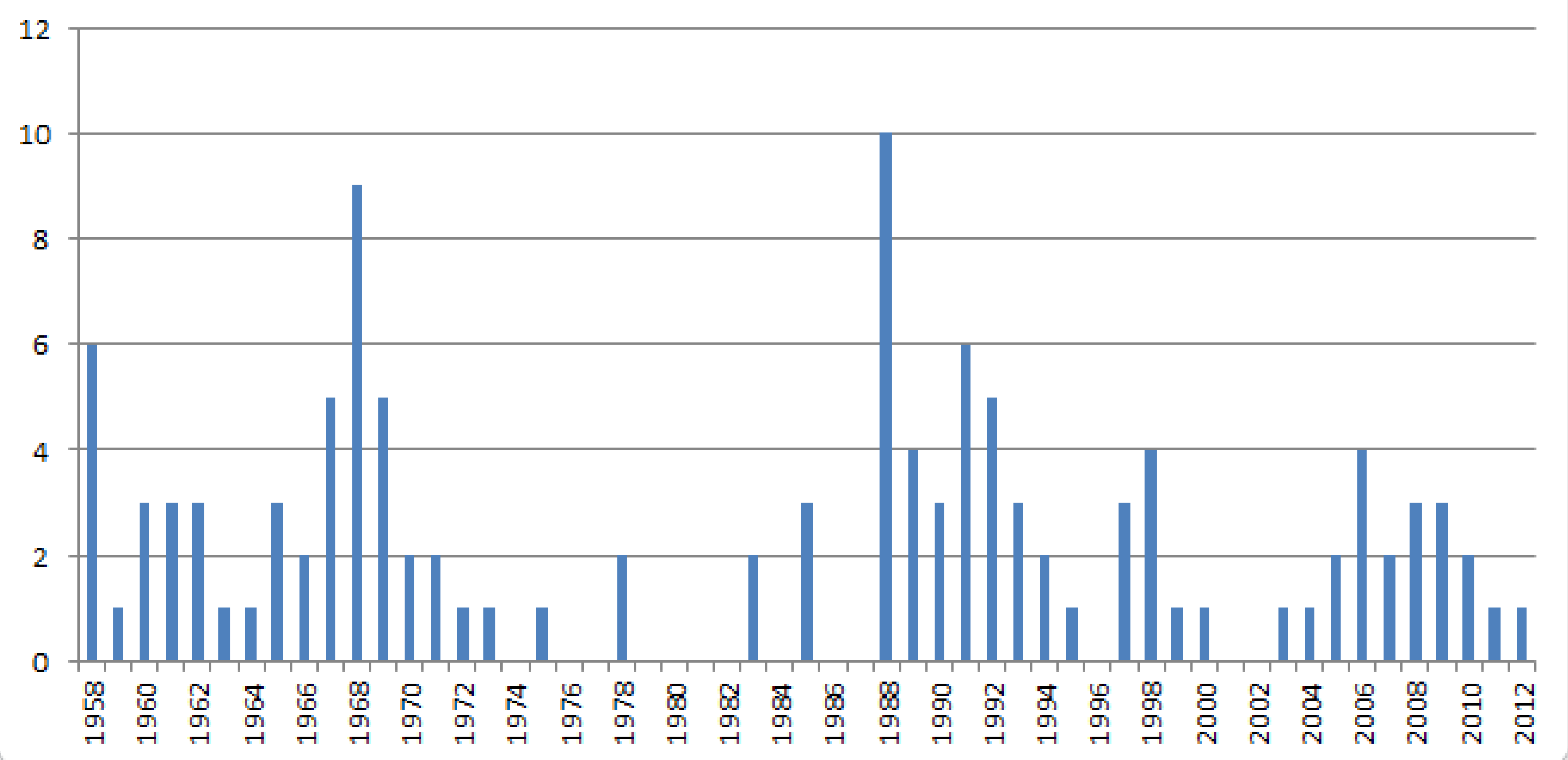


Figure : Students enrolled in *Teaching Mathematics in Secondary Schools* by year

Post-baccalaureate Programs



Figure : Hood College

The Hood College Math Department has always had a number of programs for teachers. As far back as 1924, Hood College has offered professional development courses to local teachers in the same subjects as students within the certification program. These courses include History of Education; Methods of Teaching in the High School; Principles of Secondary Education; School Management and Administration; Observation and Practice teaching; and Methods of Teaching High School in one of the subject supported by the certification program: English, Home Economics, Mathematics, Modern

Languages, Biological Sciences, Latin, or French.

Hood still offers programs for high school and middle school teachers. Upon completing the 15-credit professional development program, the teacher receives a certificate in secondary mathematics education. The program is not very popular, however, because the state of Maryland mandates that teachers earn a masters degree, this option is often overlooked. Fortunately, Hood College also offers a Masters Program in Mathematics Education.

Evolution

The education department and the education certification for mathematics have evolved throughout the years. Certification required 18 credits and 6 credits worth of practice teaching in 1924. In 1957, the secondary program required 19 semester hours in professional courses and a degree in an academic field. Today, 34 education credits are required (including 12 credits of teaching), in addition to a degree in the appropriate content field.

Student teaching has always been a part of the certification, although it has never been as emphasized as it is now. Dr. Powell, Visiting Assistant Professor of the education department, and alumna of Hood College, recounts her experience as a student. In the mid sixties, education students were only required to intern in a public school for half a semester, or eight weeks. Today, education students intern at a public school in all three years of the program, including a fulltime teaching position during the last semester.

Prior to 1973, the only content specific course required for mathematics education was *Teaching of Mathematics in the Secondary School*, whose modern day equivalent is *EDUC 411 Educational Methods in Mathematics*. In 1973, a *Modern Geometry, Probability, and Differential Equations* course were made required to qualify for the education certification, in addition to the methods course.

Only within the last ten to twenty years has the program been rigorously structured. All future educators at Hood College are required to create an exit portfolio of their teaching work in order to receive their certification, while ten years ago, the portfolio was not part of the curriculum, but rather done for the sole purpose of showing possible employers. Also, the Praxis exams, standardized tests required for teachers to pass in order to continue the program, were not instituted until the 1990's.

Hood used to do little to cater to its prospective teachers. For instance, Dr. Powell explained that during her student teaching, she was given no instruction for how to plan a lesson. Also, the public schools that students were assigned to were not necessarily close, and parking on campus was very restricted at the time so students had to find creative ways to fulfill their teaching hours. Also, since the Hood semester ended before the public school semester, but the education students had to continue their internship, they had to find their own temporary housing until the public school semester was over.



Figure : Katharine Powell, Visiting Assistant Professor and Hood alumna

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