DEPARTMENT OF EDUCATION

PROFESSIONAL STANDARDS BOARD

14 **DE Admin. Code** 332

Statutory Authority: 14 Delaware Code,
Section 122(d) (14 **Del.C.** §122(d))

PUBLIC NOTICE

Educational Impact Analysis Pursuant To 14 Del.C. Section 122(d)

332 Certification Technology Education Teacher

A. Type Of Regulatory Action Requested

Amendment to Existing Regulation

B. Synopsis Of Subject Matter Of Regulation

The Professional Standards Board, acting in cooperation and collaboration with the Department of Education, seeks the consent of the State Board of Education to amend 14 **DE Admin. Code** 332 Certification Technology Education Teacher. The regulation concerns the requirements for certification of educational personnel, pursuant to 14 **Del.C.** §1220(a). It is necessary to amend this regulation to align it with changes in statute regarding the licensure and certification of educators, and to update the course requirements for the position. There are no approved educator preparation programs in Delaware for Technology Education teachers. The requirements have been aligned with the Delaware Technology Education student content standards and the national Technology Education content standards. The regulation will be renumbered 1568 to reflect its movement to the Professional Standards Board section of the Department of Education regulations. It will also be renamed Standard Certificate Technology Education Teacher to make it consistent with other regulations for standard certificates for educators.

C. Impact Criteria

1. Will the amended regulation help improve student achievement as measured against state achievement standards? The amended regulation addresses student achievement by establishing standards for the issuance of a standard certificate to educators who have acquired the prescribed knowledge, skill and/or education to practice in a particular area, to teach a particular subject or to instruct a particular category of students to help ensure that students are instructed by educators who are highly qualified.

2. Will the amended regulation help ensure that all students receive an equitable education? The amended regulation helps to ensure that all teachers employed to teach students meet high standards and have acquired the prescribed knowledge, skill and/or education to practice in a particular area, to teach a particular subject or to instruct a particular category of students.

3. Will the amended regulation help to ensure that all students' health and safety are adequately protected? The amended regulation addresses educator certification, not students' health and safety.

4. Will the amended regulation help to ensure that all students' legal rights are respected? The amended regulation addresses educator certification, not students' legal rights.

5. Will the amended regulation preserve the necessary authority and flexibility of decision makers at the local board and school level? The amended regulation will preserve the necessary authority and flexibility of decision makers at the local board and school level.

6. Will the amended regulation place unnecessary reporting or administrative requirements or mandates upon decision makers at the local board and school levels? The amended regulation will not place unnecessary reporting or administrative requirements or mandates upon decision makers at the local board and school levels.

7. Will decision making authority and accountability for addressing the subject to be regulated be placed in the same entity? The decision-making authority and accountability for addressing the subject to be regulated rests with the Professional Standards Board, in collaboration with the Department of Education, and with the consent of the State Board of Education.

8. Will the amended regulation be consistent with and not an impediment to the implementation of other state educational policies, in particular to state educational policies addressing achievement in the core academic subjects of mathematics, science, language arts and social studies? The amended regulation will be consistent with, and not

an impediment to, the implementation of other state educational policies, in particular to state educational policies addressing achievement in the core academic subjects of mathematics, science, language arts and social studies.

9. Is there a less burdensome method for addressing the purpose of the new regulation? 14 **Del.C.** requires that we promulgate this regulation.

10. What is the cost to the state and to the local school boards of compliance with the amended regulation? There is no additional cost to local school boards for compliance with the regulation.

~~332 Certification Technology Education Teacher~~

~~Effective July 1, 1994~~
~~(Formerly Industrial Arts)~~

~~1.0 The following shall be required for the Standard license in the middle level grades and 9-12 and is valid at the elementary level (if appropriate elementary foundation courses have been successfully completed.) NOTE: Many colleges and universities are currently producing K-12 certified technology education teachers.~~

~~1.1 Bachelor's degree from an accredited college and,~~

~~1.2 Professional Education~~

~~1.2.1 Completion of an approved teacher education program in Technology Education or,~~

~~1.2.2 A minimum of 24 semester hours to include Human Development, Methods of Teaching Technology Education, Identifying/Treating Exceptionalities, Effective Teaching Strategies, Multicultural Education, and student teaching at the appropriate level (7-12) and,~~

~~1.3 Specific Teaching Field~~

~~1.3.1 Major in Technology Education or,~~

~~1.3.2 Completion of an approved teacher education program in Technology Education or,~~

~~1.3.3 A minimum of 48 semester hours including at least two courses in each of the following technology system or equivalent areas:~~

~~1.3.3.1 Communications: Graphic Communications, Photography, Telecommunications, Electric Communications, Architectural Design, Drafting and Design, Research and Development in Communications, Audio-Video Communications, desk top Publishing, Pre-Engineering and other*.~~

~~1.3.3.2 Physical (Product and Transportation): Electricity/Electronics, Transportation Power, Construction, Control Systems, Materials and Processes, Manufacturing Enterprise, Pre- Engineering, Alternate Energy Systems, Aviation and Aero-Space, Research and Development in Physical technology, Material and Testing Processes, Structure Design and Evaluation, Non-metallic Processes, Metallic Processes, Production Systems, and other*.~~

~~1.3.3.3 Bio-Related: Waste Management, Fuels and Chemicals, Environment Technology, Cybernetics, Pre-Engineering, Health Care Systems, Ergonomics, Research and Development in Bio-related Technology, Bio-Technical Systems and other*.~~

~~*NOTE: This does not comprise an exhaustive list of possible course offerings. Other courses in these areas may be acceptable upon review.~~

~~2.0 The following shall be required for the Standard Technology Education Endorsement to the present License (for existing Industrial Arts Teachers holding a Standard or Professional Status Certificate) shall include the following components:~~

~~2.1 Introduction to Technology Education, K-12~~

~~2.2 Technology Foundations, Transfer and Assessment~~

~~2.3 Technology and Society~~

~~2.4 Current Trends and Practices In Implementing a Technology Education Program~~

~~2.5 Control Technology Systems, Computer Applications, Inventions and Innovations~~

~~3.0 The Technology Education endorsement shall be required for all current Industrial Arts certified teachers who have not completed an approved undergraduate or graduate technology education teacher preparation program by June 30, 1999.~~

~~3.1 Timeline: 5 years.~~

~~3.2 The Department of Education shall offer the endorsement courses (one time on an in-service basis) to all current Industrial Arts certified teachers. Thereafter, cooperative efforts shall be established with local and surrounding higher education institutions to offer the required endorsement courses listed in 2.0.~~

~~4.0 Licenses that may be issued for this position include Standard and Limited Standard.~~

~~4.1 The Limited Standard License may be issued upon request of a Delaware public school district for a teacher employed for this position who meets the standards as set forth in 2.3 of regulation 301 General Regulations for Certification of Professional Public School Personnel.~~

1568 Standard Certificate Technology Education Teacher

1.0 Content

1.1 This regulation shall apply to the requirements for a Standard Certificate, pursuant to 14 **Del**C. §1220(a), for Technology Education Teacher (Grades K-12).

2.0 Definitions

2.1 The following words and terms, when used in this regulation, shall have the following meaning unless the context clearly indicates otherwise:

"Department" means the Delaware Department of Education.

"License" means a credential which authorizes the holder to engage in the practice for which the license is issued.

"Standard Certificate" means a credential issued to certify that an educator has the prescribed knowledge, skill, and/or education to practice a particular area, teach a particular subject, or teach a category of students.

"Standards Board" means the Professional Standards Board established pursuant to 14 **Del.C**. §1201.

"State Board" means the State Board of Education of the State pursuant to 14 **Del.C.** §104.

3.0 In accordance with 14 **Del.C**. §1220(a), the Department shall issue a Standard Certificate as a Technology Education Teacher to an applicant who holds a valid Delaware Initial, Continuing, or Advanced License; or Standard or Professional Status Certificate issued by the Department prior to August 31, 2003, and who meets the following requirements:

3.1 A bachelor's degree from an NCATE specialty organization recognized educator preparation program offered by a regionally accredited college or university with a major in technology education; or

3.2 A bachelor's degree from a state approved educator preparation program offered by a regionally accredited college or university, with a major in technology education, where the state approval body employed the appropriate NASDTEC standards or NCATE specialty organization standards with a major in technology education; or

3.3 Passage of the appropriate PRAXIS™ II test approved by the Standards Board and the State Board in Technology Education; or

3.4 A bachelor's degree in any field from a regionally accredited college or university and completion of the semester hours indicated below from a regionally accredited college or university, taken either as part of a degree program or in addition to it:

3.4.1 A minimum of twenty-four (24) semester hours in technology systems or equivalent areas, with a minimum of six (6) semester hours in each of the three areas listed below and an additional six (6) semester hours in any one of the areas listed below:

3.4.1.1 Communications (a minimum of six (6) semester hours):

3.4.1.1.1 Courses which contain the applications of communication technologies which compose, store, send, receive, and understand ideas and information.

3.4.1.2 Physical Technology Systems (a minimum of six (6) semester hours):

3.4.1.2.1 Production: Courses which contain the analysis of goals, inputs, processes, outputs, and feedback of manufacturing and construction systems.

3.4.1.2.2 Energy: Courses which contain the principles and applications of radiant and potential energy, fluid and mechanical power.

3.4.1.2.3 Transportation: Courses which contain concepts and applications of land, air, space, and sea transportation.

3.4.1.3 Bio-Related (a minimum of six (6) semester hours):

3.4.1.3.1 Courses which contain techniques and methods for managing and retrofitting bio-related systems in existing and futuristic residential, commercial, and industrial environments; and

3.4.2 A minimum of twenty-one (21) semester hours of pedagogy from a regionally accredited college or university, or equivalent in-service courses approved by the Department, to include:

3.4.2.1 Human Development;

3.4.2.2 Methods and Strategies for Teaching Technology Education;

3.4.2.3 Identifying/Treating Exceptionalities;

3.4.2.4 Effective Teaching Strategies;

3.4.2.5 Multicultural Education;

3.4.2.6 Standards-Based Technology Education in Delaware; and

3.4.2.7 Student Organizations.

9 DE Reg. 49 (7/1/05) (Prop.)