

Chapter 4

Teacher Preparedness and Certification

Revise preparation and certification requirements to resolve a shortage of teachers in the STEM/STEAM and Makerspace areas.

CONCERN: Difficulty in Recruiting CTE Teachers and the Process for CTE Endorsement

Comprehensive high schools have difficulty building CTE programs because of difficulty in attracting appropriately certificated staff. Administrative regulations addressing certification for the CTE endorsement are overly prescriptive and many provisions are unclear, causing an adverse impact on hiring.

RECOMMENDATIONS

40. The New Jersey Department of Education and the State Board of Education should clarify CTE teacher certification and preparation requirements that contain conflicting and ambiguous provisions involving required levels of education and the substitution of work experience for a college degree.
41. NJDOE and the State Board of Education should consider revisions to alternate-route-to-certification qualifications to encourage more skilled individuals to become licensed to teach CTE programs.
42. The state Department of Education should relax teacher certification standards in vocational instructional areas to allow credit for years of working experience.
43. NJDOE should collaborate with employers and labor organizations when revising requirements for the CTE endorsement.
44. NJDOE and the State Board of Education should create a new certification category, or amend existing requirements, to enable non-CTE teachers to instruct in the STEM/STEAM (science, technology, engineering, the arts and mathematics) and Makerspace¹⁰⁸ learning areas. There is a shortage of teachers in these content areas, which stress problem-solving and practical application.
45. The state Department of Education should collaborate with NJSBA, the New Jersey Technology and Engineering Educators Association, university partners, NJEA and other organizations to create the framework for a short course for Integrative STEM/STEAM and Makerspace courses.
46. The state Department of Education should create a shorter training program (6-12 months) for teachers so that they can obtain a certificate to teach STEM and STEAM courses that include design-based pedagogy and manufacturing components.

¹⁰⁸ For information on Makerspaces in education, see: "The 'Maker Mindset' and How It Can Transform Schools" by Marc Natanagara, *New Jersey School Leader*, March 30, 2017, 15, New Jersey School Boards Association, accessed July 30, 2018, <https://www.njsba.org/news-publications/school-leader/march-april-2017-volume-47-5/maker-mindset-can-transform-schools/>.

47. The state Legislature and the State Board of Education should identify and revise statutes and regulations, respectively, that unduly impinge on the ability of school districts to deliver necessary services to students pursuing post-secondary employment opportunities.
48. School districts should identify and publicize issues that they face in hiring and retaining appropriately certified staff to provide required instruction to students who are pursuing post-secondary employment opportunities.

BACKGROUND/DISCUSSION

CTE is the only teaching area that is focused on the applied learning of skills with a blending of theoretical learning. These skills mirror workplace situations, responsibility and leadership.

School districts statewide are experiencing difficulty attracting certified, competent staff to provide instruction to non-college bound learners due to obstacles created by overly prescriptive regulations. Certification requirements should be revised to allow districts to meet the instructional needs of non-college bound learners to ensure that they have the skills necessary to enter the workplace upon graduation from high school.

New Jersey has an alternate route to certification. The state should also consider an endorsement process for CTE, similar to the one created by the Center for Teaching and Learning to increase the number of teachers qualified to teach physics. The program, sanctioned by the NJDOE, has helped to alleviate a shortage of physics teachers.¹⁰⁹

STEM/STEAM

In addition, there is a shortage of teachers in the areas of STEM/STEAM and Makerspace learning areas. Existing certification requirements prevent or make it difficult for non-CTE teachers to obtain certification to teach STEM/STEAM content areas. The Department of Education should consider creating a new certification or loosening the existing requirements for regular education teachers to obtain a certification in STEM/STEAM and Makerspace learning areas. This would help increase the number of students who could participate in design-based classes that target workplace readiness skills.

The Department of Education should also investigate the creation of a framework for a short course for teaching Integrative STEM/STEAM and Makerspace courses, with collaboration by partners such as NJSBA, NJTEEA, NJEA, colleges and universities, and other organizations. In addition, NJDOE should investigate creating a certification fast-track pathway of one year that will enable teachers to earn a certificate to teach STEAM/STEM courses that include design-based pedagogy and manufacturing components.

¹⁰⁹ Bamford, "Physics for All," <https://www.njsba.org/news-publications/school-leader/julyaugust-2014-volume-45-1/physics-for-all/>.

The Task Force also discussed the need for clarification on matters such as what should be required to teach STEM/STEAM in a hands-on style in settings outside of CTE. Many of the skills taught in CTE programs—for example, electricity, carpentry, plumbing and computer repair—would benefit students throughout their lives, regardless of their career plans.

Ambiguity

The existing administrative regulations that govern the CTE endorsement are contained in *N.J.A.C. 6A:9B*. (See “Administrative Code Overview” at the end of this chapter.) The career and technical education (CTE) endorsement authorizes the holder to teach approved career and technical education programs in grades nine through 12 in all public schools. The holder of a standard CTE endorsement who has completed the study requirements in *N.J.A.C. 6A:9B-14.19(b)2i* and *ii*, or *14.20(b)2i* or *ii*, is also authorized to place and supervise career and technical education students in school-sponsored cooperative education experiences in the occupation in which the holder is certified as part of a career and technical education program.

An applicant for the instructional certificate with a CTE endorsement must successfully navigate a host of requirements. For example, the candidate must obtain a certificate of eligibility, a provisional certificate, become eligible for a renewal provisional certificate, and obtain a certificate of eligibility with advanced standing (CEAS). Some of the provisions pertaining to these certificates impede otherwise qualified candidates from obtaining the endorsement.

The Task Force was able to identify some of the provisions that appear overly restrictive or ambiguous and exacerbate the shortage of CTE teachers. Additional comprehensive review of these regulations is warranted.

Below are examples of provisions that are overly restrictive or ambiguous.

- Under *N.J.A.C. 6A:9B-11.3* (“Career and Technical Education”), to obtain an instructional certificate with a CTE endorsement, a candidate must, among a multitude of other requirements, complete requirements for certificates of eligibility with advanced standing (CEAS) pursuant to *N.J.A.C. 6A:9B-8.2*. One of the requirements listed under this section is that the candidates must “hold a bachelor’s or an advanced degree from a regionally accredited college or university.” However, another provision, *N.J.A.C. 6A:9B-5.8*, “Minimum degree and age requirement,” states the following: “(t)he requirement of a baccalaureate degree *shall not apply to applicants for career and technical education endorsements* as set forth in *N.J.A.C. 6A:9B-11.3 ...*” (emphasis added).

When read together, these regulations are inconsistent and ambiguous: One section requires applicants to hold a bachelor’s or advanced degree; the other does not.

- In addition, the NJDOE may wish to review the wording of the following regulation to clarify its intent:

N.J.A.C. 6A:9B-5.8 Minimum degree and age requirement

Applicants for teaching certificates shall be at least 18 years old, have graduated from an

approved high school or have an equivalent education as determined by the Board of Examiners, and have received a baccalaureate degree from a regionally accredited higher education institution. *The requirement of a baccalaureate degree shall not apply to applicants for career and technical education endorsements as set forth in N.J.A.C. 6A:9B-11.3, for educational interpreter endorsements as set forth in N.J.A.C. 6A:9B-14.18, or for military science endorsements as set forth in N.J.A.C. 6A:9B-11.8. (emphasis added)*

- *N.J.A.C. 6A:9B-11.3(b)(1)* allows a candidate/applicant for the CTE endorsement to substitute work experience in place of a baccalaureate degree. One element for qualification is that the candidate must demonstrate 8,000 hours of employment over the past ten years. The candidate’s work experience must be verified by his or her employer(s). However, the regulation does not address instances where a candidate’s former employer has gone out of business or is otherwise unavailable to verify the candidate’s submission. While a need to confirm both the license and experience is certainly advisable, alternate methods of confirmation of the work experience should be permitted where an applicant is unable to seek confirmation from an employer. Such alternate records could include redacted tax filings, or other documents with suitable reliability, including affidavits.
- The same regulation *N.J.A.C. 6A:9B-11.3* does not allow applicants to substitute teaching experience in the occupation for the required 8,000 hours of occupational experience. However, in many vocations, persons with vast years of experience in their field gravitate toward instructing others in the workplace, and may spend the majority of their time engaged in duties that translate easily and directly into the classroom. It would be valuable to allow candidates to use a combination of work and teaching experiences. This would benefit both school districts and applicants, while augmenting the pool of applicants qualified to provide the instruction needed to meet the increasing educational needs of all students—including those whose post-secondary plans do not include pursuing a four-year degree.
- The regulations create an exception to the requirement that teaching experience in an occupation cannot be used as a substitute for the required occupational experience. They state that the Department of Education may consider teaching experience in an apprenticeship training program registered with the U.S. Department of Labor or “equivalent state agency” as evidence of eligible employment experience. However, the regulation does not specify the equivalent state agency(ies) to which it refers. Therefore, the Department of Education should clarify which state agency or agencies may have a registered apprenticeship program that may be used as teaching experience.
- Subparagraph (ii) of *N.J.A.C. 6A:9B-11.3(b)(1)* pertaining to self-employment reiterates the 8,000-hour employment requirement. Many self-employed individuals may be adept at their vocation, yet may not have accrued 8,000 hours of self-employment over the past ten years. This is especially true where an individual has recently initiated the business and may actually be in need of part-time hours outside of that new business to supplement income during its startup and initial phases. Consideration should be given to expanding opportunities for individuals who have the skills but may not meet the precise requirements of the administrative regulations.

- Subparagraph (b)(2) of *N.J.A.C. 6A:9B 11.3* speaks to degree-based endorsements using a bachelor's degree or higher. The regulation specifically mentions candidates who graduated after 2016, but does not mention criteria for candidates who may have graduated prior to that date. It is not clear whether this omission was intentional. Clarification of the baccalaureate requirements for candidates who have graduated prior to 2016 would be beneficial and should take into consideration the regulations as they existed at the time that a candidate graduated.

Industry and trade are in need of trained employees who have a vested interest in working with NJDOE to ensure that appropriate certification standards are developed and implemented to guarantee a workforce-ready labor pool.

ADMINISTRATIVE CODE OVERVIEW

Pursuant to *N.J.A.C. 6A:9B-11.3*, Career and Technical Education, in order to obtain an instructional certificate with a career and technical education endorsement, a candidate must be at least 18 years of age, have graduated from an approved high school or attained an equivalent education, as determined by the New Jersey Board of Examiners, and have received a baccalaureate degree from an accredited higher education institution. In addition, a candidate must successfully complete the following requirements:

1. Certificate of Eligibility. A certificate of eligibility is defined in *N.J.A.C. 6A:9-2.1* to mean a certificate with lifetime validity issued to persons who have completed degree, academic study, and applicable test requirements for certification. The CE permits the applicant to seek and accept employment in corresponding positions requiring certification. "Charter school certificate of eligibility" or "CSCE" means a certificate with lifetime validity issued to a person who has a bachelor's degree and has satisfied applicable test requirements for certification. The CSCE permits the applicant to seek and accept employment at charter schools in positions requiring certification. The CSCE may be used only for employment in charter schools and does not satisfy the requirements for employment in school districts, excluding charter schools.
2. Provisional Certificate. A provisional certificate is defined by *N.J.A.C. 6A:9-2.1*, as a two-year certificate issued to candidates who have met the requirements for initial employment, but who have not yet met the requirements for a standard certificate. Provisional certificates may be renewed for two years if the candidate has not completed the requirements for a standard certificate within two years pursuant to *N.J.A.C. 6A:9B-8.5*. Provisional certificates are issued to instructional, administrator, and educational services staff whose employment with a specific school district is authorized by a CE or CEAS. Provisional certificates are also issued to initially employed educational services staff who have at least one year, but less than three years, of successful full-time experience or the equivalent in another state under that state's standard certificates. As required under *N.J.A.C. 6A:9B*, such staff shall also be enrolled in a CE educator preparation program and/or a district mentoring program, or a residency program.
3. Renewal of both a provisional and standard certificate. A standard certificate is defined by *N.J.A.C. 6A:9-2.1* to mean a permanent certificate issued to a person who has met all certificate requirements; and

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4. Certificate of Eligibility with Advanced Standing (CEAS). A CEAS is defined by *N.J.A.C. 6A:9-2.1* to mean a certificate with lifetime validity issued to persons who have completed degree, academic study, applicable test requirements, and CEAS educator preparation programs for certification. The CEAS permits the applicant to seek and accept employment in positions requiring certification.
 - a. A charter school provisional certificate is defined in *N.J.A.C. 6A:9-2.1* to mean a two-year certificate issued to novice teacher candidates who have been hired by a charter school, but who have not met the requirements for a standard certificate. Charter school provisional certificates are issued to novice instructional staff who are employed at a charter school, may be used only for employment in charter schools, may be renewed once at the discretion of the employing school, and do not satisfy the requirements for obtaining employment in school districts, excluding charter schools.
 - b. A charter school standard certificate is defined in *N.J.A.C. 6A:9-2.1* to mean a permanent certificate issued to a person who has met all charter school certification requirements. This certificate may be used only for employment in charter schools and does not satisfy the requirements for employment in school districts, excluding charter schools.

CERTIFICATE OF ELIGIBILITY

According to *N.J.A.C. 6A:9B-8.3* and the other sections of code it references, in order to qualify for a certificate of eligibility, a candidate must demonstrate sufficient experiential or degree-based expertise.

Experience-Based Endorsement - the candidate must:

1. Pass an examination in physiology, hygiene, and substance abuse issues; and
2. Possess a State-issued occupational license, certificate, or registration if the occupation is regulated by the state; and
3. Demonstrate employment experience consisting of a minimum of four years of Department-approved and documented employment experience, which will be equivalent to 8,000 hours of employment. The employment experience shall be acquired within 10 years of the endorsement application and shall be verified by the applicant's employer(s); or
 - a. Teaching experience in the occupation cannot be used as a substitute for the required four years of occupational experience; however, the Department may consider teaching experience in an apprenticeship training program registered with the United States Department of Labor or equivalent state agency as evidence of eligible employment experience;
4. Demonstrate self-employment experience consisting of a notarized letter from a tax preparer and/or an attorney verifying the following:
 - a. That the candidate has filed State and/or Federal taxes for self-employment using a Federal U.S. Census North American Industry Classification System (NAICS) that is appropriate for the endorsement; and

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- b. That the candidate's self-employment experience meets the minimum of four years of employment experience within 10 years of the certificate application, which will be equivalent to 8,000 hours of employment.
5. Demonstrate military experience consisting of a military discharge (DD-214) indicating military qualifications and occupational training. These qualifications will then be assessed to determine if credit can be extended to the candidate.

Degree-Based Endorsement (bachelor's degree or higher) - the candidate must:

1. Demonstrate possession of a four-year or higher degree in a NJDOE approved subject area and at least 30 credits in a coherent sequence of courses in the subject area from a regionally accredited college or university.
2. Pass an examination in physiology, hygiene, and substance abuse issues pursuant to *N.J.A.C. 6A:9B-5.9*.
3. If the candidate seeks an endorsement in a regulated occupation for which a State-issued occupational license, certificate, or registration is required for employment in or practice of the occupation, the candidate must also hold the State-issued occupational license, certificate, or registration.
 - a. Candidates with a bachelor's degree or higher who graduate on or after September 1, 2016, with a GPA that is below 3.00 in a four-year degree program but is at least 2.50 when a GPA of 4.00 equals an A grade, and for whom no State-endorsed test is available, may meet the above requirements by submitting evidence of a minimum of two years (4,000 hours) of full-time employment or equivalent part-time employment.

Degree-Based Endorsement (associate's degree) - the candidate must:

1. Possess a two-year degree in a Department-approved subject area for the endorsement and shall complete at least 30 credits in a coherent sequence of courses in the subject area from a regionally accredited college or university; and
2. Submit evidence of a minimum of two years of eligible employment, which will be equivalent to 4,000 hours of employment. The employment must be approved by the NJDOE and documentation must be submitted demonstrating the required hours of employment. The employment experience must have been acquired within 10 years of the candidate's application and must be verified by the applicant's employer(s).
 - a. Teaching experience in the occupation cannot be used as a substitute for the required four years of occupational experience; however, the Department may consider teaching experience in an apprenticeship training program registered with the United States Department of Labor or equivalent state agency as evidence of eligible employment experience; and
3. Pass an examination in physiology, hygiene, and substance abuse issues pursuant to *N.J.A.C. 6A:9B-5.9*.

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4. If the candidate seeks an endorsement in a regulated occupation for which a State-issued occupational license, certificate, or registration is required for employment in or practice of the occupation, the candidate must also hold the State-issued occupational license, certificate, or registration.

PROVISIONAL CERTIFICATE

According to *N.J.A.C. 6A:9B-8.4*, in order to obtain a provisional certificate, a school district must demonstrate to the NJDOE that the provisional certificate candidate:

1. Holds a CE or CEAS in the endorsement area required for the teaching assignment;
2. Has obtained and accepted an offer of employment in a position that requires instructional certification;
3. Has registered in the district mentoring program upon employment; and
4. For a candidate with a CE, be enrolled in a CE educator preparation program.
5. A provisional teacher holding provisional certification in and working under one endorsement may seek employment and be employed in more than one school district during the provisional time period prior to earning the standard certificate.
6. The annual summative evaluation rating(s) from each prior employing school district shall constitute part of the record on which a principal shall base his or her standard certification determination, pursuant to *N.J.A.C. 6A:9B-8.6*.
7. The provisional certificate must be issued each time a teacher is employed with a CE or CEAS by a different school district from the previous employing school district that submitted the initial provisional certificate documentation. However, the two-, four-, and six-year time restraints pursuant to *N.J.A.C. 6A:9B-8.5* shall still apply.

RENEWAL OF PROVISIONAL CERTIFICATE

According to *N.J.A.C. 6A:9B-8.5*:

(a) The principal may recommend a provisional teacher for renewal of his or her two-year provisional certificate if the candidate has not yet completed the requirements for the standard certificate within the first two years of employment pursuant to *N.J.A.C. 6A:9A-8.4*.

1. A provisional teacher who meets the criteria in (a) above but is not renewed for employment within the same school district following the two-year provisional certificate may seek and accept, under the same endorsement, a position with another school district, pursuant to *N.J.A.C. 6A:9B-8.4(d)*.

(b) Except as indicated in *N.J.A.C. 6A:9B-8.8*, 10, and 11, a candidate shall meet the following requirements to be eligible for renewal of a provisional certificate:

1. Hold a CE or CEAS in the endorsement area required for the teaching assignment;
2. Be employed in or accept an offer of employment in a position that requires instructional certification;

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3. Complete a district mentoring program;
4. Be enrolled in or have completed a CE educator preparation program if a candidate has a CE; and
5. Be recommended for renewal by his or her principal pursuant to *N.J.A.C. 6A:9B-8.6*.

(c) The two-year provisional certificate may be renewed once for a maximum provisional period of four years, or may be renewed twice for a maximum provisional period of six years if the candidate fulfills one or more of the following in addition to the renewal requirements in (b) above:

1. Holds a CE with a teacher of students with disabilities endorsement, or a CE with a bilingual/bicultural endorsement, and a CE with an endorsement appropriate to the subject or grade level to be taught or holds a CE with an English as a second language endorsement and the duration of the required coursework and CE educator preparation program extends beyond the four-year period;
2. Was issued the provisional certificate after February 1 of the first school year the candidate was employed; or
3. Does not receive from the school district, by July 31 of the fourth year, the annual summative rating as required for standard certification pursuant to *N.J.A.C. 6A:9B-8.4*.