JOINT STATE GOVERNMENT COMMISSION

General Assembly of the Commonwealth of Pennsylvania

TEACHER CERTIFICATION GRADE SPANS IN PENNSYLVANIA:

STAFF STUDY PURSUANT TO ACT 82 OF 2018

JUNE 2019



Serving the General Assembly of the Commonwealth of Pennsylvania Since 1937

REPORT

Teacher Certification Grade Spans In Pennsylvania: Staff Study Pursuant to Act 82 of 2018

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The Joint State Government Commission was created in 1937 as the primary and central non-partisan, bicameral research and policy development agency for the General Assembly of Pennsylvania.¹

A fourteen-member Executive Committee comprised of the leadership of both the House of Representatives and the Senate oversees the Commission. The seven Executive Committee members from the House of Representatives are the Speaker, the Majority and Minority Leaders, the Majority and Minority Whips, and the Majority and Minority Caucus Chairs. The seven Executive Committee members from the Senate are the President Pro Tempore, the Majority and Minority Leaders, the Majority and Minority Whips, and the Majority and Minority Caucus Chairs. By statute, the Executive Committee selects a chairman of the Commission from among the members of the General Assembly. Historically, the Executive Committee has also selected a Vice-Chair or Treasurer, or both, for the Commission.

The studies conducted by the Commission are authorized by statute or by a simple or joint resolution. In general, the Commission has the power to conduct investigations, study issues, and gather information as directed by the General Assembly. The Commission provides in-depth research on a variety of topics, crafts recommendations to improve public policy and statutory law, and works closely with legislators and their staff.

A Commission study may involve the appointment of a legislative task force, composed of a specified number of legislators from the House of Representatives or the Senate, or both, as set forth in the enabling statute or resolution. In addition to following the progress of a particular study, the principal role of a task force is to determine whether to authorize the publication of any report resulting from the study and the introduction of any proposed legislation contained in the report. However, task force authorization does not necessarily reflect endorsement of all the findings and recommendations contained in a report.

Some studies involve an appointed advisory committee of professionals or interested parties from across the Commonwealth with expertise in a particular topic; others are managed exclusively by Commission staff with the informal involvement of representatives of those entities that can provide insight and information regarding the particular topic. When a study involves an advisory committee, the Commission seeks consensus among the members.² Although an advisory committee member may represent a particular department, agency, association, or group, such representation does not necessarily reflect the endorsement of the department, agency, association, or group of all the findings and recommendations contained in a study report.

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¹ Act of July 1, 1937 (P.L.2460, No.459); 46 P.S. §§ 65 – 69.

² Consensus does not necessarily reflect unanimity among the advisory committee members on each individual policy or legislative recommendation. At a minimum, it reflects the views of a substantial majority of the advisory committee, gained after lengthy review and discussion.

Over the years, nearly one thousand individuals from across the Commonwealth have served as members of the Commission's numerous advisory committees or have assisted the Commission with its studies. Members of advisory committees bring a wide range of knowledge and experience to deliberations involving a particular study. Individuals from countless backgrounds have contributed to the work of the Commission, such as attorneys, judges, professors and other educators, state and local officials, physicians and other health care professionals, business and community leaders, service providers, administrators and other professionals, law enforcement personnel, and concerned citizens. In addition, members of advisory committees donate their time to serve the public good; they are not compensated for their service as members. Consequently, the Commonwealth of Pennsylvania receives the financial benefit of such volunteerism, along with their shared expertise in developing statutory language and public policy recommendations to improve the law in Pennsylvania.

The Commission periodically reports its findings and recommendations, along with any proposed legislation, to the General Assembly. Certain studies have specific timelines for the publication of a report, as in the case of a discrete or timely topic; other studies, given their complex or considerable nature, are ongoing and involve the publication of periodic reports. Completion of a study, or a particular aspect of an ongoing study, generally results in the publication of a report setting forth background material, policy recommendations, and proposed legislation. However, the release of a report by the Commission does not necessarily reflect the endorsement by the members of the Executive Committee, or the Chair or Vice-Chair of the Commission, of all the findings, recommendations, or conclusions contained in the report. A report containing proposed legislation may also contain official comments, which may be used in determining the intent of the General Assembly.³

Since its inception, the Commission has published more than 350 reports on a sweeping range of topics, including administrative law and procedure; agriculture; athletics and sports; banks and banking; commerce and trade; the commercial code; crimes and offenses; decedents, estates, and fiduciaries; detectives and private police; domestic relations; education; elections; eminent domain; environmental resources; escheats; fish; forests, waters, and state parks; game; health and safety; historical sites and museums; insolvency and assignments; insurance; the judiciary and judicial procedure; labor; law and justice; the legislature; liquor; mechanics' liens; mental health; military affairs; mines and mining; municipalities; prisons and parole; procurement; state-licensed professions and occupations; public utilities; public welfare; real and personal property; state government; taxation and fiscal affairs; transportation; vehicles; and workers' compensation.

Following the completion of a report, subsequent action on the part of the Commission may be required, and, as necessary, the Commission will draft legislation and statutory amendments, update research, track legislation through the legislative process, attend hearings, and answer questions from legislators, legislative staff, interest groups, and constituents.

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³ 1 Pa.C.S. § 1939 ("The comments or report of the commission . . . which drafted a statute may be consulted in the construction or application of the original provisions of the statute if such comments or report were published or otherwise generally available prior to the consideration of the statute by the General Assembly").



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Y VON! Counsel June 2019

To the Members of the General Assembly of Pennsylvania:

Section 1202.1 of the Public School Code of 1949, as added by Act 82 of 2018, directs the Joint State Government Commission to issue a report on the appropriateness of the fields of teacher certification, including grade span and age level limitations, in improving student outcomes; the creation or elimination of teaching certifications or endorsements; and national trends regarding grade span and age limitations of certification.

After having studied numerous research papers, regulations and statutes, researched state and national databases, and interviewed a number of current and former school administrators and prominent researchers in the field of education and teacher preparation, the Commission is pleased to release its report with recommendations, *Teacher Certification and Grade Spans in Pennsylvania*.

The report is available on our website, https://jsg.legis.state.pa.us.

Respectfully submitted,

Glenn J. Pasewicz Executive Director

TABLE OF CONTENTS

INTRODUCTION	1
HISTORY OF TEACHER CERTIFICATION	3
LITERATURE REVIEW	9
CHANGES IN FEDERAL STATUTE	21
CERTIFICATION IN PENNSYLVANIA	25
Process	25
Teacher Certification Grade Spans	27
Grade Span Shifts	27
Certificates and Endorsements in Pennsylvania	28
Certification Data for Pennsylvania	32
Emergency Certification	
NATIONAL TRENDS IN TEACHER CERTIFICATION GRADE SPANS	39
OTHER STATES: CHANGES IN CERTIFICATION GRADE SPANS	47
TEACHER SUPPLY AND DEMAND	55
FACILITIES AND ADMINISTRATORS	61
RECOMMENDATIONS	67
APPENDIX A	69
APPENDIX R	75

Pennsylvania's commitment to education is a fundamental tenet that has ensured its people's well-being since colonial times. Among the early public policies established by the Commonwealth is found the Act of March 1, 1802, "An Act to provide for the education of Poor Children gratis," wherein all children of "...every township and borough within this commonwealth" whose parents or guardians were judged to be "unable to give them necessary education" were provided with a free education at the expense of what were, at the time, local tax revenues. Further, the act directed local authorities to collect data: the names and ages, and the amount of schooling, school books, and stationary provided to the children who were enrolled were recorded. By late 1800s, the Commonwealth, through the State Superintendent, recognized the importance of teacher quality. In 1921, the state purchased the twelve "normal schools," colleges that had been established to teach teachers that were the forerunners of the Pennsylvania State System of Higher Education (PASSHE). Today's strong teacher preparation pipeline is sustained by a network of 92 public and private institutions of higher education.

Recent years have seen significant changes, both nationally and in the Commonwealth, in the number of college students choosing to pursue education degrees and then passing their state licensure exam. Between 2010-2011 to 2017-2018, the number of Instructional I Certificates issued by the Pennsylvania Department of Education (PDE) decreased from 21,045 to 7,970, a drop off of 62 percent. This startling plunge in the number of newly licensed teachers means that, for some districts in the Commonwealth, far fewer new candidates are applying for open positions.

For certain grades in particular, such as 5th and 6th grade, the pool of candidates is restricted because there is no duplication in certification as there is for grades 4 and 7 and 8 through the PreK-4 and Secondary Certification, respectively. In 2017-2018, PDE issued 626 Instructional I Certificates for Grades 4-8 English, Science, Math, and Social Studies combined. If the Grades 5–6 Instructional Add-On is included, the number grows to 880 new Instructional I Certificates issued. By comparison, in 2012-2013, the last year of the old certification bands, 10,156 people received Instructional I Certifications in a subject area that would have enabled them to teach 5th or 6th grade. These numbers are a challenge to Pennsylvania's Every Student Succeeds Act (ESSA) Consolidated State Plan in which Building Block number five states "Assure an abundant supply of highly qualified teachers."

⁴ Act of March 1, 1802 (P.L. 76, Ch. XXXIV).

⁵ This figure is an aggregate of 2012-2013 Elementary K-6, ML 6-9 Citizenship, English, Math and Science.

⁶ Pennsylvania Department of Education, "Every Student Succeeds Act Pennsylvania Consolidated State Plan," (September 18, 2017), p. 63.

In Act 82 of 2018, the Legislature specified the grade spans and age ranges of special education certificates issued after December 31, 2021. The legislature determined that other aspects of certification required additional study and directed Joint State Government Commission to conduct and prepare a report on the following:

- 1. The appropriateness of the fields of certification, including grade span and age level limitations, in improving student outcomes.
- 2. The creation or elimination of teaching certifications or endorsements.
- 3. National trends regarding grade span and age limitations of certification.⁷

JSGC staff surveyed the PDE website and spoke to staff for information on the current certification process and to access data on teacher certifications. Staff also spoke with faculty from teacher preparation programs in different sectors of higher education, including private, state-related, and public institutions. Staff contacted national associations and then reached out directly to other states, via e-mail, phone calls, and website site searches. An extensive literature review and search was made. Staff reached out to current and past staff from the State Board of Education as well as current school administrators.

The Commission would like to thank those many organizations and individuals without whose expertise this document could not have been crafted. Staff appreciates the investment of time that they gave and are deeply indebted to them for sharing their guidance and knowledge.

⁷ Act 82 of 2018 (P.L. 30, No. 14); 24 P.S. § 1202.1(c)(1).

HISTORY OF TEACHER CERTIFICATION

Even before the establishment of the United States, Pennsylvania was concerned with the education of its children. In 1683, the Colonial General Assembly of Pennsylvania indicated that all children should be taught to read and write by age 12; however this measure had few provisions to meet this goal. The Constitution of Pennsylvania was amended in 1790 mandating that the legislature create a law to establish schools which would be free for the children of poor families. Despite the noble intentions behind these early efforts, the state's goals to educate children suffered because of a scarcity of qualified teachers; furthermore, the state had no capacity to evaluate the knowledge base of teachers throughout the Commonwealth or their readiness to instruct pupils.

In the early 1800s, families with the resources would pay a subscription to a private organization for their child to be educated by a school master. What school a student attended was often determined by the language, religion, or nationalistic characteristics of a school. School conditions in many parts of the state were meager, comprised of a single room with rough furnishings, few textbooks and were only open a few months out of the year. It is estimated that approximately 4,000 private school houses were spread throughout the state by 1834. While academic rigor varied across the state, many teachers taught only the fundamentals of reading, writing, and math using rote methods. During this time, it was a commonly held belief that any well-adjusted, reasonably educated person was qualified to be a school master and that teaching did not require specialized training.

Teachers of this time were predominately male and either held another profession the rest of the year or were young students seeking an additional income and connections before furthering their studies in fields like theology, law, or medicine. Other schoolmasters were transient, foreign-educated European immigrants who would move to new communities after school let out for the year. The leaders of local communities and religious organizations who provided patronage to these private schools had the final say

⁸ Joint State Government Commission, "An Analysis of Public Expenditures for Education in the Commonwealth of Pennsylvania," (June 1944), p. 9.

⁹ Louise Gilchriese Walsh and Matthew John Walsh, *History and Organization of Education in Pennsylvania* (Indiana, Pa.: R.S. Grosse Print Shop, 1930), p. 93.

¹⁰ James Pyle Wickersham, *A History of Education in Pennsylvania, Private and Public, Elementary and Higher....* (Lancaster, Pa.: Inquirer Publishing Company, 1886), p. 156.

¹¹ *Id.* at p. 213.

¹² JSGC, An Analysis of Public Expenditures for Education, n. 5 at p.11.

¹³ *Id*

¹⁴ Walsh and Walsh, *History and Organization of Education in Pennsylvania*, n. 6 at p. 159.

¹⁵ Wickersham, A History of Education in Pennsylvania, n. 7 at p. 211.

¹⁶ *Id*.

in what qualifications were necessary to teach. Soberness, regular church attendance, and the ability to keep order in the classrooms and discipline students were thought of as important characteristics in potential schoolmasters.¹⁷

In 1834, the Pennsylvania legislature made the first meaningful step towards statewide teacher certification when it passed the Free School Laws, which established a system of public schools throughout the state. Local school districts could determine whether they continued using the pauper school system, or if they chose, free public schools. No provision in the act detailed requirements for the training of teachers, and it was left to local board of directors to set standards to obtain a teaching certificate. ¹⁸ As a result of this legislation, the position of inspector of schools was created at the district level to give examinations to potential teachers and ensure they had a fundamental grasp on reading, writing and math. These inspectors were able to provide provisional 1-year certificates, valid only in the district of the examination. ¹⁹

Two years after its creation, the public school system had 987 school districts which instructed close to 140,000 pupils with only 3,400 teachers.²⁰ The tests devised at the district level for obtaining certificates were easy by modern standards. Since there was suddenly a huge demand for teachers of any quality, many areas of the state could not turn away applicants. After the passage of the Free Schools laws, young women were encouraged to become teachers. This rudimentary certification system stayed relatively unchanged during the first two decades after its creation as the state focused its energy on establishing schools and defending the fledging school system from the vocal critics that called for its repeal. It was not until 1849 that Pennsylvania formally required a certificate to teach in the state.²¹

The next large step for Pennsylvania teacher certification happened in 1854 when the legislature effectively moved educational certification away from local communities to the county level.²² To accomplish this, the position of county superintendent was established. Elected every three years, the County Superintendent had the ability to grant certificates to teachers they examined and to make reports concerning the progress of their county's schools to the Department of State Superintendent.²³

The Act of 1854 was the first time the state explicitly required that districts teach required subjects, including reading, writing, and math as well as English grammar and geography.²⁴ Subsequently this would have an effect on certification as county superintendents wanted to be sure the teachers could instruct the courses required by law. The additions were controversial, as rural communities felt that these subjects were outside

¹⁷ Walsh and Walsh, *History and Organization of Education in Pennsylvania*, n. 6 at pp. 28-30.

¹⁸ *Id.* at p. 161.

¹⁹ Wickersham, A History of Education in Pennsylvania, n. 7 at p. 315.

²⁰ JSGC, An Analysis of Public Expenditures for Education, n. 7 at p. 18.

²¹ Walsh and Walsh, *History and Organization of Education in Pennsylvania*, n. 6 at p. 149.

²²Act of May 8, 1854 (P.L. 617, No. 610) repealed by Act of May 18, 1911 (P.L. 309, No. 191).

²³ Tho. H. Burrowes, Ed., *The Pennsylvania School Journal* (Lancaster, Pa.: Myers & Wiley, n.d.) vol. 2, p. 376. $^{\rm 24}$ Walsh and Walsh, *History and Organization of Education in Pennsylvania*, n. 6 at p. 174.

the purview of the common schools of providing basic education.²⁵ A difficult choice was presented for the county superintendents who felt that teachers should be held to high standards, but who often had to certify teachers who received poor marks on examinations or leave classrooms empty.²⁶ These failures helped reaffirm the need for effective methods to instruct teachers across the state.

During this period, a movement was taking place across the country to raise the quality of teachers, many of whom often had only graduated from the same elementary schools at which they taught. This led to the creation of the "Normal schools" named because they established new norms for teacher education. Since the creation of the Public School System, Pennsylvania tried to appropriate state funds from its disparate universities and academies to increase the numbers of qualified teachers across the state, but these institutions were not able to produce quality teachers in a sufficient volume to meet the growing demands of the state.²⁷ Pennsylvania joined this movement with the Normal School Act of 1857 which created 12 state academies to train school teachers.²⁸ After completing two years of coursework and a final exam set by the board of principals, a teacher would be granted a certificate which would let them work anywhere in the state. After an additional two years of teaching satisfactory review, they would have a diploma which acted as a form of permanent certification.²⁹

The Department of State's supervision over the public school system ended in 1857 when an independent school department was created. While in some ways this change meant that the head of the agency did not possess the same level of influence and importance as in the old configuration, there were no longer important matters of state distracting these leaders from advancing education in the state. In addition to proposing policy changes for improving the public schools, State Superintendents continued to play a major part in teacher certification. One example of this can be found in the early 1860s when State Superintendent Burrows set a minimum examination scores for all counties across the state. Previously counties had set their own standards for what constituted a passing score. ³¹

The Act 35 of 1867 required compulsory attendance at state teacher schools and redesigned the one year provisional certificates, by

Act 35 of 1867: First requirement for certified teachers to have instruction in methods and principles of teaching.

adding United States history and theory of teaching.³² This was a major step in teacher certification because for the first time state certified teachers were required to have

²⁵ *Id.* at p. 183.

²⁶ *Id.* at p. 183.

²⁷ *Id.* at pp. 145-149.

²⁸ Explore PA History, "Staying the 'Battle Axe of Ignorance': The Rise of Public Education," in "The Surest Foundations of Happiness": Education in Pennsylvania,

http://explorepahistory.com/story.php?storyId=1-9-21&chapter=2 (accessed May 24, 2019).

²⁹ Wickersham, A History of Education in Pennsylvania, n. 7 at p. 621.

³⁰ Wickersham, A History of Education in Pennsylvania, n. 7 at p. 528.

³¹ *Id.* at p. 537.

³² *Id.* at p. 560.

instruction in methods and principles of teaching. As the public school system grew, there was an effort to phase out low performing teachers who held earlier certificates which were needed when the school system was first established, with the harder to obtain permanent certificate.³³ The act also required that all Superintendents throughout the state be certified as a teacher to be able to run for their election.

The first high school in the State, Central Philadelphia High School was established in 1836 The creation of high schools would eventually lead to a division in certifications between those qualified to teach advanced subjects and those who taught elementary schools. The first high school in the State, Central Philadelphia High School was

established in 1836; it was not until 1895 that high schools spread to all corners of the state.³⁴ Each high school receiving state funds was required to have at least one teacher certified to teach numerous subjects including "book keeping, civics, general history, algebra, geometry, trigonometry... rhetoric, English, literature, Latin..., and the elements of physics, chemistry..."³⁵ 1895 was also the year where compulsory student attendance at schools was made mandatory by the state.

At the turn of the 20th century there was a growing number of subjects a teacher could be certified in and teachers were no longer expected to master all the topics available. Teacher preparation curriculums began to become more focused on teaching theory, rather than predominately on content matter. ³⁶ Because there was no long standing consensus in the profession on what the fundamentals of teaching were, the methods of instruction changed significantly in the following decades. ³⁷

With the passage of the School Code of 1911, Pennsylvania reclassified the certificates given to teachers and provided a base salary that scaled according to certifications level.³⁸ The act discontinued county-level permanent certificates; now only the state could issue a permanent certificate upon the completion of a state exam.³⁹ The newly created state certificate allowed teachers who held professional certificates to take an exam to be able to teach anywhere in the state. While the common schools were still the most widely-used places of teacher instruction at that time, graduates of approved colleges who completed the necessary teaching-related coursework could get a provisional certificate, which could be made permanent after 2 years.⁴⁰

The creation of Pennsylvania's modern certification system can be traced back to the Edmonds Act of 1921 which centralized many of the educational responsibilities

³⁴ Walsh and Walsh, *History and Organization of Education in Pennsylvania*, n. 6 at p. 294.

 37 *Id*.

³³ *Id.* at p 561.

³⁵ Act of June 28, 1895 (P.L. 413, No. 293, § 5).

³⁶ Diane Ravitch, "A Brief History of Teacher Professionalism," United States Department of Education, *White House Conference on Preparing Tomorrow's Teachers*, August 2003. https://www2.ed.gov/admins/tchrqual/learn/preparingteachersconference/ravitch.html.

³⁸ Act of May 18, 1911 (P.L. 309, No. 191, Art. XIII).

³⁹ Walsh and Walsh, *History and Organization of Education in Pennsylvania*, n. 6 at p. 257

⁴⁰ *Id.* at p. 258

regarding teacher certification.⁴¹ The Edmonds Act also established the State Council of Education which consolidated duties of the state board of education and the council of colleges and universities and was in charge of certification requirements for teachers throughout the state.⁴² The law required that by 1927 state-certified teachers needed to possess a 2-year degree from a state college to teach elementary school and a Bachelor of Arts degree to teach secondary school.⁴³ While these measured helped ensure all teachers had achieved uniform standards, it decreased the local control of counties to make determinations about who was best qualified to teach in their schools. It also limited individuals' ability to test into a teaching position without instruction.

During the 1930s, the Great Depression slowed the graduation rate of qualified teachers, which forced Pennsylvania to cut the education budget by a third, leading to widespread layoffs of teachers and necessitating the consolidation of many rural schools districts. ⁴⁴ Despite these setbacks, by 1940, a little over a century after its creation, the state public school system had experienced tremendous growth. There were on average over 1.6 million students daily attending school for an 8-month academic year. These students were instructed by over 64,000 teachers across 2,552 districts. ⁴⁵ In the following years, many current and potential teachers enlisted to serve in World War II. In the post-war decades, the number of Pennsylvanians with GI Bills increased the demand and attainability of all levels of education. During this time teacher associations began to grow and organize themselves at a national level and began to petition state governments to enact higher standards for teacher certifications. ⁴⁶

1947 JSGC report lead to creation of Public School Code of 1949

Since its passage in 1911, the Pennsylvania School Code had grown unwieldy and disorganized due to its frequent amendment by the legislature. While an effort to reorganize the school code was attempted in 1947, it was delayed because several major changes to the law were still under consideration at that time. The Legislature tasked the Joint State Government Commission with creating recommendations on how to best reorganize existing education law while incorporating amendments from the 1947 legislative session. The Commission's report also included language changes to enhance clarity and preserve the intent of the law as well as suggestions for the removal of redundant passages. This codification effort resulted in the Public School Code of 1949, which is still in use today. Under the revised school code, laws relating to teacher certification were placed in Article 12.⁴⁷

⁴¹ Act of May 20, 1921 (P.L. 1041, No. 376) (known as The Edmonds Act). *See also* Walsh and Walsh, *History and Organization of Education in Pennsylvania*, n. 6 at p. 269.

⁴² Id. See Also "The Surest Foundations of Happiness": Education in Pennsylvania, n. 25.

⁴³ *Id. See Also* Pennsylvania State Education Association, "PSEA: A Timeline," accessed May 6, 2019, https://www.psea.org/about-psea/mission--history/psea-a-timeline/.

⁴⁴ "The Surest Foundations of Happiness": Education in Pennsylvania, n. 25.

⁴⁵ JSGC, An Analysis of Public Expenditures for Education, n. 5.

⁴⁶ David L. Angus, *Professionalism and the Public Good: A Brief History of Teacher Certification*, (Washington, D.C.: Thomas B. Fordham Foundation, 2001), p. 28.

⁴⁷ JSGC. *The Codification of the School Laws*, January 1949, Harrisburg PA.

The 1960s was a period of great change for the state system of education, which expanded rapidly to meet the needs of Pennsylvania's post-war baby boom population. Despite the increasing numbers of students, the number of school districts continued to decline. By 1961, Pennsylvania offered certificates in Elementary Education K-8, and numerous 7-12 single subject secondary school specializations. In 1963, the State Board of Education was established to set certification and degrees. After the creation of a new Department of Education in 1969, Elementary certifications covered core subjects in K-6.

By 1973 the state had begun issuing certification of mid-level subjects such as Math, English, and Social Studies.⁵⁰ In 1975, the state created an Early Childhood Education Certification which covered Nursery to grade 3.⁵¹ Throughout the rest of the century the Department of Education continued to add new certifications for emerging fields such as computer science. By this time all normal schools had been converted into 4-year state colleges and in 1982 these schools were reorganized and became the State System of Higher Education. The State Board of Education was reestablished in 1988, and it continues to be responsible for revising the regulations of teacher certifications and teacher preparation programs throughout the state to this day.

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⁴⁸ Pennsylvania Department of Education, Certification Staffing Policy Guidelines, http://www.education.pa.gov/Educators/Certification/Staffingpercent20Guidelines/Pages/default.aspx.

⁴⁹ Pennsylvania Department of Education, Certification Staffing Policy Guidelines, CSPG 70 Grades 4-3

⁴⁹ Pennsylvania Department of Education, Certification Staffing Policy Guidelines, CSPG 70 Grades 4-8, accessed May 28, 2019.

https://www.education.pa.gov/Educators/Certification/Staffingpercent20Guidelines/Pages/CSPG70.aspx. ⁵⁰ Pennsylvania Department of Education, Certification Staffing Policy Guidelines, CSPGs 51-54 Middle Level Subjects, accessed May 28, 2019.

https://www.education.pa.gov/Educators/Certification/Staffingpercent20Guidelines/Pages/default.aspx. ⁵¹ Pennsylvania Department of Education, Certification Staffing Policy Guidelines, CSPG 69 Grades PK-4, accessed May 28, 2019.

https://www.education.pa.gov/Educators/Certification/Staffingpercent20Guidelines/Pages/CSPG69.aspx.

Advocates of early childhood education have published dozens of papers that emphasize the important role that appropriate preparation plays in the development of early childhood learners. The Pennsylvania Association for the Education of Young Children (PennAEYC), a chapter of the National Association for the Education of Young Children (NAEYC), is a prominent participant in researching and advocating for education policy options related to early childhood education.

In 2010, NAEYC established standards to support its accreditation and recognition of degree-granting programs that provide experience and credentialing in early childhood education.⁵² The standards themselves are structured to reflect a three part learning curve that would be expected of a well-designed curriculum. Beginning with establishing the understanding of the theoretical, the standards then progress into early childhood educators' expected depth of knowledge, and finally focus on the application of the knowledge in professional practice.

Throughout the standards, from theoretical to practice, NAEYC emphasizes the significance of each program's:

- commitment to diversity and inclusion;
- respect for family, community and cultural contexts;
- respect for evidence as a guide to professional decisions; and
- reliance on guiding principles of child development and learning.

as they prepare early childhood educators for their careers. Moreover, the standards are designed by NAEYC to address each early childhood learner's needs from birth through age 8.

NAEYC's seven standards require that educator preparation programs:

- 1. Promote child development and learning
 - a. Know and understand characteristics and needs
 - b. Know and understand the multiple influences on development and learning
 - c. Using the knowledge to create optimal learning environments

⁵² National Association for the Education of Young Children, "NAEYC Standards for Early Childhood Professional Preparation," Position Statement, July 2009.

https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/2009percent20Professionalpercent20Preppercent20stdsRevisedpercent204 12.pdf.

2. Build family and community relationships

- a. Know diverse family and community characteristics
- b. Engage families and communities through relationships
- c. Involve families and communities in learning

3. Observe, document, and assess to support children and families

- a. Understand goals, benefits, and uses of assessments
- b. Know observation, documentation, and other tools for assessments and data collection
- c. Understand and practice assessment to promote positive outcomes, including assistive technology for disabled
- d. Build partnerships with families and colleagues

4. Use developmentally effective approaches

- a. Understand positive and supportive interactions and relationships with children
- b. Know effective strategies and tools for early learning
- c. Use a broad "repertoire" of appropriate teaching and learning techniques
- d. Reflect on own practice to promote positive outcomes

5. Use content knowledge to build meaningful curriculum

- a. Understand content knowledge and resources in different academic disciplines.
- b. Use central concepts, tools, and structures of content areas
- c. Use knowledge, standards, and resources

6. Become a professional

- a. Uphold ethical standards
- b. Engage in continuous collaborative learning, professional development
- c. Integrate knowledge
- d. Engage in informal advocacy for ECL

7. Early childhood field experiences

- a. Observe and practice in at least two of the three ECL groups (birth-3, 3-5, 5-8)
- b. Observe and practice in two of the three main types of early education (early grades, child care centers and homes, Head Start programs)⁵³

The building blocks of these standards are set in the research that has been compiling for many years. There is a body of research that points to the fact that early childhood learners are at unique significant stages of intellectual and psychological development, and that educators need appropriate preparation to cultivate the youngsters' growth through this stage. In *One Size Doesn't Fit All: The Need for Specialized Teacher Licenses in Early Childhood*, Sarah Jackson, Natalie Orenstein, and Laura Bornfreund

⁵³ National Association for the Education of Young Children, "Initial Standards Summary," http://www.kvccdocs.com/KVCC/2016-Summer/ECE200/Content/L-13/NAEYC-Standards.pdf.

examined teacher preparation in Pennsylvania, Ohio, South Carolina, and Arkansas because these states did not have "typical overlapping PreK-3 and K-5," licenses and to see how the certification bands may have changed over the previous 5 years. ⁵⁴ They examined the push and pull between what is understood to be best for young children learners and school systems' requirements for flexibility, wherein the authors' conclusion is that the bureaucracy usually "wins out" over children's developmental needs.

There is some support for the position that teachers often choose broader grade span certifications over narrower certifications because the job market is more accommodating for the broader grade spans. The characterization is that administrators are more attracted to the flexibility provided by teachers who are prepared and certified to teach a wide span of grades. Further, teachers themselves indicate that they want to avoid being stuck in the early education grades where salaries are lower. "Narrower license structures like PreK-3 require principals and hiring managers to keep teachers with more specialized knowledge in PreK-3 classrooms because they are not licensed to teach elsewhere." 55

The presumption that teacher shortages are either present or impending may encourage states to establish wider certification bands in response. The authors' contend that wider certification bands result in less specialized training and less emphasis on early childhood learning.

Pennsylvania switched in 2007 from certifications for N-3 and K-6 to PreK-3 and 4-8, with the change becoming effective in 2013. Advocates of the change are said to have stated that K-6 teachers would sometimes be assigned as kindergarten teachers without having sufficient specialized preparation for early childhood learners. "Partly what we're trying to do here is say that children ages 3 to 8 learn differently than other age cohorts," said Joan Benso, president and CEO of Pennsylvania Partnerships for Children. "So the large number of children in our K-3 classrooms should benefit from teachers that have had an education background focused in early childhood." ⁵⁶

South Carolina's narrow bands influence how higher education trains and prepares teachers. South Carolina has a PreK-3 and is the only state with 2-6 certification. Under pressure from school administrators, legislators considered shifting to a 1-6 certification. Advocates convinced the state to study the matter further, fearing that the broader certification would weaken teacher training for the early grades.

Ohio had PreK-3 since the 1990s. Earlier bands included K-6 or 1-6 and gave administrators far more flexibility in hiring and assigning.

⁵⁴ Sarah Jackson, Natalie Orenstein, and Laura Bornfreund, "One Size Doesn't Fit All: The Need for Specialized Teacher Licenses in the Early Grades," *New America Foundation*, June 2017. https://www.newamerica.org/education-policy/policy-papers/one-size-doesnt-fit-all/; http://na-production.s3.amazonaws.com/documents/One-Size-Doesnt-Fit-All.pdf.

⁵⁵ *Id*. at p. 4.

⁵⁶ *Id*. at p. 8.

Arkansas shifted away from PreK-4, 4-8, and 9-12 in 2012 in favor of K-6 and 7-12 certifications. A birth-K certification was subsequently added and increased flexibility in staffing. In the old system, administrators "... [w]ere just bombarded with P-4s but didn't have jobs for them," said Richard Abernathy, Director of the Arkansas Association of Elementary Administrators. On the other hand, they faced a shortage of teachers certified for fifth and sixth grades.⁵⁷

Arkansas educators noted the effects that broad certifications have on teacher preparation.

Professors in teacher training programs report that broader licenses lead to programs that cover too much ground and cannot adequately focus on the developmental needs of younger children.⁵⁸

Arkansas eliminated birth-PreK credits and experience from the K-6 curriculum. Training for birth-K is available for the birth-K certification program, but early childhood education advocates fear there will be too few certified teachers because of low marketability of those certifications. Arkansas school administrators were pleased with the grade span expansion, believing it would produce teachers who were qualified to teach all grades on their campuses.⁵⁹

Overall, in the experiences of school administrators interviewed by Jackson, Orenstein and Bornfreund, "it is in the teacher's personality and temperament more than his or her training or license that make for success in the classroom, regardless of the students' ages."60 As stated by Julie Davis, with the Ohio Association of Elementary School Principals, "The bottom line [of good teaching] is how to establish rapport, relationships, and a good climate in your classroom no matter what the age." 61

Higher education instructors who prepare teachers for the classroom say that broader certification spans tend to emphasize training in the older grades at the expense of time spent on training in the younger grades. Early childhood education advocates cite these concerns, along with research, as they advocate for certifications that focus on young children's education.

Both sides of the debate between narrower bands and wider bands, that is, between early childhood education advocates and school administrators, recognize that teachers are reluctant to certify in grade spans that will constrain their job opportunities, e.g. birth-PreK bands. Early childhood education preparation programs see low interest among students. 62

⁵⁷ *Id*.

⁵⁸ *Id*. at p. 9.

⁵⁹ *Id*.

⁶⁰ *Id*. at p. 8.

⁶² *Id.* at p. 9.

Jackson, Orenstein, and Bornfreund conclude with three main recommendations for states:

- 1. Establish PreK-3 certification (or a variation)
- 2. Review early childhood and elementary teaching certifications and consider reducing overlap across certifications, so that teachers receive appropriate training for their certifications.
- 3. Provide continuing education and professional development for principals and administrators to prepare them as "stronger PreK, K, and early grade leaders." 63

Bornfreund additionally found that the general system for training and certifying teachers was not reflective of contemporary research, knowledge, and experience with regard to teaching PreK through 3rd grade:⁶⁴

Preparation, licensure, and hiring systems are not currently designed to ensure that children in the early grades are taught by teachers with appropriate training. Part of the problem stems from differences of opinion about what constitutes early childhood, with some educators seeing early childhood as the stage of life before a child enters kindergarten, ending by the start of kindergarten or start of first grade.

Bornfreund proposed fourteen recommendations that span the full spectrum of education, from individual teachers to the federal government. To some extent, these recommendations would create an optimal preparation program for early childhood educators because they do not take into consideration practical obstacles.

Teacher Prep Programs:

- 1. Raise the bar on admission requirements in general, ensuring that elevated requirements also apply to early childhood preparation.
- 2. Provide more field experiences in PreK, kindergarten, and the early grades—within both elementary and early childhood preparation programs—and ensure that those experiences are connected to coursework.
- 3. Hire faculty who have had extensive teaching experience in a PreK, kindergarten, first, second, or third grade classroom.
- 4. Require approved early childhood teacher preparation programs to provide multiple field experiences that are woven into courses on content and methods, classroom management, and child development and that include interaction with both individual and groups of students.

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⁶³ *Id.* at p. 11.

⁶⁴ *Id*. at p. 1.

- 5. Consider aligning standards for early childhood teacher preparation programs with standards designed by national early childhood education organizations.
- 6. Require approved early childhood programs to provide student teaching opportunities throughout the program in multiple settings at multiple levels of the early grades.
- 7. Separate licenses to avoid overlap in the early grades.
- 8. Make early childhood licensure more attractive to prospective teachers by instituting salaries and benefits in publicly funded PreK programs that are on par with salaries and benefits for kindergarten and early-grades teachers.
- 9. Require articulation agreements between community college early childhood associate degree programs and university bachelor's degree programs.

States and School Districts:

10. Eliminate personnel policies and practices that limit principals' options in assigning specific teachers to classrooms. Teachers' readiness for the particular teaching assignment should take priority over seniority and other factors.

School Districts:

- 11. Provide professional development for principals that includes training on early childhood education and highlights both the importance of family engagement and how young children learn content.
- 12. Communicate with local education schools about staffing needs including challenges facing the school district and subject-area shortages and work together to determine the district teachers who are best suited to serve as supervisors of student teachers.

Federal Government:

- 13. Encourage high-quality alternative certification programs to include early childhood education and should study their impact on teacher effectiveness and student learning.
- 14. Provide funding to assist education schools to transition their traditional preparation programs into clinically based preparation programs.⁶⁵

These recommendations do not address the practical difficulties of existing union contracts and salaries in Pennsylvania.

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⁶⁵ *Id*. at p. iv.

In Valued Added: Early Childhood Education Certified Teachers in the Kindergarten and Primary Elementary School Workplace, Rev. 12-11-2017, Lynne Hartle reviewed a number of studies of the preparation of teachers in early childhood education. ⁶⁶ Hartle reported that the studies' authors emphasized the significance of specialized preparation, and noted that teacher quality, beginning with a bachelor's degree, is the most salient factor influencing early childhood learners' success. Specialized preparation, for example, "is more predictive of success in positive student-teacher interactions" than is the teacher's years of experience.⁶⁷ The studies' findings, in corroboration with others', show that early childhood learners are best prepared for further education when their teachers demonstrate strong backgrounds in social and emotional development, which helps children with self-regulation and planning. First graders can overcome social, behavioral, or academic problems if they have teachers who are trained in early childhood education. Moreover, the consensus among the studies Hartle reviewed is that the American Association of Colleges for Teacher Education (AACTE) and NAEYC recommendations that "specific and unique body of knowledge, practice, and attitudes" be included in teacher preparation curricula is of unquestionable benefit to early childhood learners. In other words, the recommendations from AACTE and NAEYC are that the preparation curricula for early childhood teaching should not be "watered down" versions of elementary education teaching curricula.⁶⁸

Hartle concluded by offering four main themes to guide policy planning:

- 1. Elementary teachers must have additional training, possibly though in-service, to acquire the necessary skills to teach early childhood learners.
- 2. Early childhood education teachers are more prepared to teach early childhood and scaffold their later learning years.
- 3. Early childhood education teachers are prepared in performance assessment and observation of early childhood learners to identify problems and potentially avoid excessive remediation in later grades.
- 4. There exists an overwhelming need for K-3 teachers with early childhood education preparation to help children who did not receive high-quality preschool experiences.

Further research by Laura Bornfreund, et al. in Beyond Subprime Learning: Accelerating Progress in Early Education, advocated for modifying public policy to exploit the gains substantiated when early childhood education specialization takes hold.⁶⁹

⁶⁶ Lynn Hartle, "Valued Added: Early Childhood Education Certified Teachers in the Kindergarten and Primary Elementary School Workplace," Certification Toolkit, Pennsylvania State University, Revised December 2017.

⁶⁷ *Id*. at p. 1.

⁶⁸ *Id*.

⁶⁹ Laura Bornfreund, Clare McCann, Conor Williams, and Lisa Guernsey, "Beyond Subprime Learning: Accelerating Progress in Early Education," *New America*, Policy Brief, 2014, https://static.newamerica.org/attachments/743-beyond-subprime-learning/Beyond_Subprime_Learning_by_Bornfreund-et-al_New_America_Jul2014.pdf.

The authors' conclusion was that, while the public, political, and research consensus is stronger than ever, the field remains in dire need of streamlined operations, financial sustainability, and more focus on teaching and learning.⁷⁰

Among the notable recommendations proffered by the authors is that policy makers and program leaders should replace K-5 or K-6 certificates with two separate certifications, one for birth/PreK-3, and one from 3 or 4 through the middle grades. Interestingly, Pennsylvania embarked on this move in 2007, seven years prior to the publication of the paper by Bornfreund, *et al.*, and finalized the changeover in 2013, at which point certifications for PreK-3 and K-6 were no longer awarded in favor of the creation of PreK-4 and 4-8 certifications.

The crux of the paper, to "accelerate progress in early education," is verbalized more directly in the authors' recommendation that policy makers and program leaders rethink early childhood learners' outcome standards and assessments with an eye toward coordination of teaching and learning through the early stages of education. From an operational perspective of improving student outcomes, the authors recommend that accountability systems be improved such that early childhood educators are evaluated according to measures that are applicable to early childhood education, rather than according to measures that are more indicative of performance in higher grades. The Schools and states should include early childhood education data in statewide data collection systems (apparently few states collected early childhood data at the time of the paper).

The authors take the step of recommending changes above and beyond the purview of local and state school administrators, stating that guidelines and standards for birth through PreK education should be uniform across the 50 states and also align with Common Core State Standards and the Head Start Framework. Further, they recommend that all states have a common kindergarten entry assessment, and that national standards be set to guide teachers for K through 3rd grade.

A November 2016 paper by Bruce Atchison, Louisa Diffey and Emily Workman, *K-3 Policymakers' Guide to Action: Making the Early Years Count*, states that children who score lowest on 3rd grade reading assessments are more likely to drop out of high school. A child who reads proficiently in 3rd grade is four times more likely than a belowgrade reader to graduate high school. In light of findings such as these, the authors show that research prompted 44 states to increase PreK spending by \$1.9 billion from 2012 to 2016. More than half of states had legislation to improve 3rd grade reading by 2016.

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⁷⁰ *Id*. at p. 2.

⁷¹ *Id*. at p. 15.

⁷² *Id.* at p. 17

⁷³ *Id.* at p. 13.

⁷⁴ Bruce Atchison, Louisa Diffey, and Emily Workman, "K-3 Policymakers' Guide to Action: Making the Early Years Count," *Education Commission of the States*, November 2016. https://www.ecs.org/k-3-policymakers-guide-to-action-making-the-early-years-count/.
⁷⁵ *Id*.

With regard to funding, the authors go on to identify a number of policy areas that could be developed to enhance and improve student success beginning in early childhood. Funding should be "strategic, blended, and equitable." That is, funding should be flexible so that decision makers can appropriate it to the programs where it is most needed, (e.g. recruitment of teachers in high-need schools). Second, policy makers should make use of Title I and Title II federal funds. Third, policy makers should invest funding into those data systems that help K-3 teachers keep track of student performance on assessments, student absenteeism, and quality of student work. Fourth, the authors recommend that areas given priority funding be those that are critical for good early childhood outcomes, such as supports for early interventions, kindergarten entry assessments, evaluation of interventions, and leadership development. To

Ongoing leadership development and workforce development are areas the authors emphasize as important components of successful early childhood education programs. Among topics that should be given special consideration are the creation of PreK-3 or K-3 teacher preparation and certification. They recommend that early childhood education be made a part of teacher preparation and that it include practical experience in the curriculum. Perhaps somewhat different from what is long established in Pennsylvania's teacher preparation programs is the recommendation that teacher training curricula include coursework and experience in family engagement. ⁷⁸

In corroboration with other studies, such as those listed previously, the paper by Atchison, Diffey, and Workman recommend that policy makers develop, within the realm of early childhood education, statewide learning guidelines, statewide emotional and social standards; that they encourage student-centered learning and culturally appropriate assessments of student performance; and that they further ensure that individual student assessments are used to guide instruction and for diagnostic purposes. ⁷⁹ It is unclear for what other purposes assessments would be conducted.

A 2017 paper by Deborah Stipel, et al can be taken as offering recommendations that may provide a strategic framework for policy makers considering enhancements recommended by Atchison, Diffey, and Workman. PK-3: What Does It Mean for Instruction?, examines the effects of education beyond early childhood and the early elementary years. Policy initiatives have emphasized continuity between PreK and elementary education, particularly with integration of supports (nutrition, health, community) from PreK programs into early elementary grades. However, there is no direct evidence that continuity of instruction provides any benefit over and above the value of high quality education. Further, the authors saw no empirical evidence that the programs and policies initiated actually lead to better continuity, stating "Our point is simply that there is nothing magical about third grade, and we need to be careful not to let the name of

⁷⁷ *Id*. at p. 4.

⁷⁶ *Id.* at p. 3.

⁷⁸ *Id*. at p. 7.

⁷⁹ *Id*. at p. 8.

⁸⁰ Deborah Stipek, *et al.*, "PK-3: What Does It Mean for Instruction?" *Society for Research in Child Development*, Social Policy Report 30, no. 2 (2017). https://files.eric.ed.gov/fulltext/ED581657.pdf.

this important movement lure us into thinking that alignment and continuity after third grade matter less than before third grade."81

The recommendations put forth by Stipek emphasize how school systems must carry forward to the higher grades those structural strategies that are expected to improve early childhood and early elementary education. The authors' recommendations can be organized as starting with alignment of standards and assessments within and across grades at the state and district levels. They recommend having a database that follows children from PreK through elementary school that is accessible to teachers. Formative assessments should link to standards that establish a clear instructional framework that guides practices and decisions at the school level. Included among these practices should be an emphasis on social-emotional development and academic skills. In most cases, these developmental practices will require increasing attention to academic skills in PreK and increasing attention to social-emotional development in K-3. Teacher development is addressed from the perspective of continuity. They recommend continuity of curriculum from PreK through 3rd grade, and also continuity for professional support and development by installing coaches and mentors that work with teachers across the PreK-3 span. Similarly, teacher collaborations across PreK-3 is almost certainly necessary for continuity. The authors draw the conclusion around continuity as follows.

Ultimately, the goal is to create a coherent educational experience for children in which each grade builds and elaborates on what was learned in the previous grade. Although we lack evidence on the value-added of this kind of continuity across grades, we do have evidence related to how the structure and sequencing of instruction over grades are likely to affect children's learning. 82

The skills learned in early childhood education preparation are frequently applicable to older elementary grades, given that appropriate pedagogy engages students as individuals in as much as it is possible to do so.⁸³ This ought to be considered if and when policy makers are determining continuity of growth across grades and grade spans.

Moving beyond early childhood and early elementary grades, one finds research that supports specialized preparation for middle school years. Dr. Penny Howell and colleagues released *Specialized Preparation for Middle Level Teachers: A National Review of Teacher Preparation Programs*. ⁸⁴ Despite research that shows that teacher preparation for the middle grades is nonetheless important than preparation for early learners, Howell *et al* found that 45 states have certifications for middle level (5-9 grades), yet almost half of the colleges and universities do not offer courses and practical experiences specific to those grades. During the 2013-2014 academic year, data were analyzed from the 1,234 institutions that provided teacher preparation programs. Of these, 50.8 percent had no

⁸¹*Id*. at p. 17.

⁸² *Id.* at p. 16.

⁸³ Phone call between Dr. Fuller and JSGC Staff, May 15, 2019.

⁸⁴ Penny B. Howell, *et al.*, "Specialized Preparation for Middle Level Teachers: A National Review of Teacher Preparation Programs," *Research in Middle Level Education* 39, no. 1, (2016). https://eric.ed.gov/?id=EJ1132959.

specialized middle level teacher preparation program.⁸⁵ There appears to be no common reason as to why states with middle band certifications do not have teacher preparation that specializes in the middle bands and the data show no discernable connection between that the size of an institution and whether it has specialized middle level preparation courses. College and university courses for middle level certifications appear to tack the middle grades onto existing elementary or secondary preparation courses. 86

The good news for the Commonwealth is that, at least for the 2013-2014 academic year, Pennsylvania ranked first (91.8 percent) among those states with the highest percentage of institutions offering specialized courses and experiences in middle grades. The other states were Georgia, Kentucky, Arkansas, Missouri, North Carolina, and Delaware. 87

Howell et al. provided recommendations. Although not applicable to Pennsylvania at present, they are reminders of the significance of specialized middle level preparation.

- 1. All teacher preparation programs should examine curricula to determine the extent to which middle range certification preparation is available and explore how to make it available to those seeking teacher certification in those grades.
- 2. Institutions should hire faculty who specialize in middle range certification education.
- 3. States without middle range certifications should develop and establish them.

⁸⁵ *Id.* at p. 6.

⁸⁶ *Id*.

⁸⁷ *Id*.

In 1965, Congress adopted the Elementary and Secondary Education Act (ESEA), establishing the federal government's expanded role in public education. In 2002, Congress passed the No Child Left Behind Act (NCLB), which reauthorized and renamed the ESEA as well as addressed Title I provisions to provide financial assistance to schools with high percentages of children from low-income families. NCLB also introduced the concept of "highly qualified teacher" requirements. The requirements for the "highly qualified teacher" were that:

- (i) the teacher has obtained full State certification as a teacher (including certification obtained through alternative routes to certification) or passed the State teacher licensing examination, and holds a license to teach in such State, except that when used with respect to any teacher teaching in a public charter school, the term means that the teacher meets the requirements set forth in the State's public charter school law; and
- (ii) the teacher has not had certification or licensure requirements waived on an emergency, temporary, or provisional basis.

In creating the concept of a highly qualified teacher, NCLB distinguished between those who taught in elementary schools versus those who taught in middle and secondary schools. They also factored in teachers who were new to the profession and those who had been teaching with existing certification.

With respect to any elementary school teacher who was new to the profession, a "highly qualified teacher" was one who:

- (I) holds at least a bachelor's degree; and
- (II) has demonstrated, by passing a rigorous State test, subject knowledge and teaching skills in reading, writing, mathematics, and other areas of the basic elementary school curriculum (which may consist of passing a State-required certification or licensing test or tests in reading, writing, mathematics, and other areas of the basic elementary school curriculum).

⁸⁸ Elementary and Secondary Education Act of 1965, Pub. L. No. 89-10, 79 Stat. 27.

⁸⁹ No Child Left Behind Act of 2001, Pub L. No. 107-110, 115 Stat. 1425, 1959.

⁹⁰ *Id.* § 9101, *repealed by* Every Student Succeeds Act of 2015, Pub. L. No. 114-95, 129 Stat. 1802.

When speaking of a middle or secondary school teacher who was new to the profession, this means the teacher holds at least a bachelor's degree and has demonstrated a high level of competency in each of the academic subjects in which the teacher teaches by:

- (I) passing a rigorous State academic subject test in each of the academic subjects in which the teacher teaches (which may consist of a passing level of performance on a State-required certification or licensing test or tests in each of the academic subjects in which the teacher teaches); or
- (II) successful completion, in each of the academic subjects in which the teacher teaches, of an academic major, a graduate degree, coursework equivalent to an undergraduate academic major, or advanced certification or credentialing.

Finally, when speaking of an elementary, middle, or secondary school teacher who is not new to the profession, a "highly qualified teacher" is one who, "holds at least a bachelor's degree and,

- (i) has met the applicable standard in clause (i) or (ii) of subparagraph (B), which includes an option for a test; or
- (ii) demonstrates competence in all the academic subjects in which the teacher teaches based on a high objective uniform State standard of evaluation.

This "high objective uniform State standard of evaluation" must meet the following qualifications under Sec. 9101 (23) (C) (ii):

- (I) is set by the State for both grade appropriate academic subject matter knowledge and teaching skills;
- (II) is aligned with challenging State academic content and student academic achievement standards and developed in consultation with core content specialists, teachers, principals, and school administrators;
- (III) provides objective, coherent information about the teacher's attainment of core content knowledge in the academic subjects in which a teacher teaches;
- (IV) is applied uniformly to all teachers in the same academic subject and the same grade level throughout the State;
- (V) takes into consideration, but not be based primarily on, the time the teacher has been teaching in the academic subject;

- (VI) is made available to the public upon request; and
- (VII) may involve multiple, objective measures of teacher competency.

During a hearing to the House Education Committee in 2007, Dr. Jim Fogarty, a member of the State Board of Education acknowledged that "since 2003, the State Department of Education by necessity has focused its attentions on the development and implementation of state policies that address the requirements of the Federal No Child Left Behind Act."91

In December 2015, Congress passed the Every Student Succeeds Act (ESSA), reauthorizing the ESEA of 1965 and amending and repealing portions of NCLB.92 In ESSA, the phrase "highly qualified teacher" is struck and replaced with phrases such as "effective" or more frequently "who meets the applicable state certification and licensure requirements, including any requirements for certification obtained through alternative routes to certification, or, with regard to special education teachers, the qualifications described in section 612(a)(14)(C) of the Individuals with Disabilities Education Act"94 This removal of the specific phrase "highly qualified" in the ESSA indicates that states have much more autonomy to determine what makes a teacher qualified to serve.

⁹¹ Page 8, House of Representatives Education Hearing, March 28, 2007 testimony of Dr. Jim Fogarty, member of the State Board of Education

⁹² Every Student Succeeds Act of 2015, Pub. L. No. 114-95, 129 Stat. 1802.

⁹³ E.g. *Id.* at § 9214(d)(4)(A).

⁹⁴ E.g. Every Student Succeeds Act of 2015, Pub. L. No. 114-95, 129 Stat. 1802, 2160, §§ 9214(c)(5), 9214(c)(6), and 9214(c)(7)(B).

Process

The majority of aspiring teachers in Pennsylvania prepare for their vocation by enrolling in a college or university that has an education program approved by the Pennsylvania Department of Education. As of March 2019 Pennsylvania is home to 97 programs that are approved to provide preparation for Instructional I certifications.

During their freshman and sophomore years, students take prerequisite courses to prepare for more advanced studies that occur during the junior and senior years. Many students further enhance their practical experiences outside of the classroom by working, interning, or volunteering with youngsters so as to gain practical knowledge on their track to becoming future educators. Starting as early as freshman year, because of the unique characteristics in pedagogy that separate early childhood education from older grades, the curricular tracks for PreK-4th grade are distinct from the coursework tracks for older grades (4th-8th and 7th-12th). The junior and senior years include more advanced coursework, such as pedagogy and psychology, along with classroom experience under the supervision of mentoring teachers. The final 12 weeks of their baccalaureate program is spent student teaching in a classroom.

A student's eligibility for certification depends on his or her maintaining a GPA of at least 3.0 and on performance on the SAT, ACT, PAPA, or Core assessments. Students are encouraged to take these assessments prior to college graduation so that, provided that they score well enough and earn a baccalaureate degree, they will be eligible for certification immediately upon graduation. While the SAT and ACT tests are widely recognized assessments of reading, writing, and mathematics skills, it is not necessary that a candidate have scored well or even taken those exams in order to apply for teacher certification. As the alternative, students may take the Pre-Service Academic Performance Assessment (PAPA) approved by PDE, which is currently offered through Pearson, Inc. Students who are pursuing certification as a Vocational Instructor may take the Core assessment offered through ETS, Inc. Further, the basic skills test requirements may be waived at the discretion of the PDE certification evaluator according to certain exceptions. Candidates for certification in the 4th-8th and the 7th-12th grade spans must meet or exceed minimum standard scores on the Content Area Test, commonly referred to as the Praxis, for the subject they wish to teach. Praxis assessments are approved for 56 subjects under the broad topics of English, Mathematics, Sciences, and Social Studies.

Certifications for a number of subject areas span PreK-12th grade. PreK-12th grade certifications apply to such subject areas as Art, Music, World Languages, Library Science, Family and Consumer Science, Business, Technology, and Health and Physical

Education.⁹⁵ Applicants who wish to teach these subjects must take the Fundamental Subjects Test in the area in which they wish to certify. The Fundamental Subjects Test is not the same as the Basic Skills Test, nor is it the same as the Content Area Test. Applicants whose scores for the Fundamental Subjects Test are below the standard score may request to have their coursework GPA weighed against the test score.

Upon graduation and passing the required certification tests, the candidate submits an application to PDE through the Teacher Information Management System (TIMS). The candidates must:

- Be of good moral character
- Be at least 18 years of age
- Be a U.S. citizen or a legal permanent resident holding a valid green card
- Hold a minimum of a bachelor's degree
- Complete, with a minimum 3.0 GPA, a PDE approved preparation program

Upon approval of PDE, the candidate is awarded an Instructional I certificate to teach in the applicable grade range. The Instructional I certification lasts for six years and is regarded as temporary.

After teaching for three to six years, the teacher must take steps to achieve the permanent Instructional II certification in order to continue working as a certified public school teacher in the commonwealth. Requirements for earning the Instructional II certification include:

- Having accumulated 24 post-baccalaureate credits, six of which must be associated with the teachers area of certification and/or designed to improve professional practice;
- Three years of satisfactory service as verified by the chief administrator of the employing school entity; and
- Completion of an induction program approved by PDE and verified by the chief administrator of the employing entity.

A subtantial change to this process has been the increase in the number of Add-on Instructional subject areas that an individual who holds a Level I certificate can get in almost any subject area by taking the appropriate content test. 96 PDE regulations state that,

The Department may issue additional subject areas to holders of Instructional ... or Intern certification who pass the appropriate subject matter testing components in areas other than Health and Physical Education, Cooperative Education and all Special Education areas.

⁹⁵ The Excel sheet from PDE. Special Education certifications are included among those requiring the FST.

⁹⁶ Pennsylvania Department of Education, Certification Staffing Policy Guidelines, CSPG 21 Grades PK-4, (Modified: May 1, 2017), accessed May 28, 2019.

https://www.education.pa.gov/Educators/Certification/Staffing percent 20 Guidelines/Pages/CSPG 21.aspx.

The Department may identify other certification areas to be excluded from eligibility based on criteria established by the Secretary and approved by the Board. 97

In addition to those subject areas listed in the regulation above, American Sign Language, Reading specialist and all special education areas are excluded from the testing Add on process.

Teacher Certification Grade Spans

Grade Span Shifts

Prior to January 1, 2013, the certification grade spans were as follows:

Early Childhood – *spanned ages 3 to 8*; included Prekindergarten through 3rd grade

Elementary – *spanned ages 4 to 11*; included Kindergarten through 6th grade

Middle – *spanned ages 11 to 15*; included 6th through 9th grades

Secondary – *spanned ages 11 to 21*; included 7th through 12th grades

After January 2, 2013, the certification grade spans are:

Early Childhood – *spans ages 3 to 9*; includes Prekindergarten through 4th grade

Elementary/Middle – *spans ages 9 to 14*; includes 4th through 8th grade

Secondary – *spans ages 11-21*; includes 7th through 12th grade

In 2016, the Department instituted a Grades 5-6 Instructional Add-On certificate so that those college graduates who emerged with a degree in Early Childhood education (PreK through 4th grade) could take a test and add 5th and 6th grade to those that they are qualified to teach. Act 82 of 2018 made the Grades 5-6 Instructional Add-On permanent by placing it into the Public School Code of 1949.

The State Board of Education began the process of shifting grade spans in 2007. During this process, the Department of Education brought together 600 individuals to participate in stakeholder meetings and formulate their recommendations. The SBE then held three public roundtables in Pittsburgh, Harrisburg and Allen. After the SBE created their own proposed amendments, an additional meeting was held in Harrisburg to discuss the Board's new proposal. The Board also sought input from teacher education faculty from about twenty independent colleges and universities. This led to three additional

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⁹⁷ 22 Pa Code § 49.18(e).

public hearings. The result of this review was that the age and grade spans that were split into four separate state certifications prior to 2013, became three certifications.

The State Board of Education is currently in the process of reviewing the certification regulations. This is an established procedure conducted at ten-year intervals based on PA Code Chapter 49 regulations. ⁹⁸

Certificates and Endorsements in Pennsylvania

The Instructional Certificates that are authorized in Pennsylvania's education regulations are grouped by individual tables below. The listings of the various certificate types and subject areas were taken from the Department's website.

Table 1
Instructional Certificates in Pennsylvania
PreK – 12 Certifications
Agriculture PK-12
Arts Education PK-12
Business, Computer and Information Technology PK-12
Environmental Education PK-12
Family and Consumer Science PK-12
Health Education PK-12
Health and Physical Education PK-12
Library Science PK-12
Marketing (Distributive Education) PK-12
Music Education PK-12
Reading Specialist PK-12
Special Education - Hearing Impaired PK-12
Special Education - Speech and Language Impaired PK-12
Special Education - Visually Impaired PK-12

⁹⁸ 22 Pa. Code § 49.51.

Technology Education PK-12				
Elementary Certification				
Grades Prekindergarten - 4				
Middle School Certifications				
Grades 4-8 English Language Arts	Grades 4-8 Science			
Grades 4-8 Mathematics	Grades 4-8 Social Studies			
Special Education Certification				
Special Education PK-8 (content area certificate	required for issuance)			
Special Education 7-12 (content area certificate	required for issuance)			
Secondary Certifications				
Mathematics 7-12	Science - Chemistry 7-12			
Citizenship Education 7-12	Science - Earth and Space 7-12			
Communications 7-12	Science - General Science 7-12			
Cooperative Education 7-12	Science - Physics 7-12			
English 7-12 Social Science 7-12				
Safety/Driver Education 7-12 Social Studies 7-12				
Science - Biology 7-12	Vocational Instructional 7-12			

Source: Pennsylvania Department of Education, "Certificates in Pennsylvania Types and Codes," accessed May 17, 2019. https://www.education.pa.gov/Educators/Certification/PAEducators/Pages/PACerts.aspx

The table above groups Instructional Certificates into five categories: PreK through 12th grade, elementary, middle school, special education and secondary. There are an additional 28 certifications, all PK-12, focused on foreign and world languages. They range from Urdu to Swahili to sign language.

Table 2				
Foreign/World	Languages			
American Sign Language	Persian Farsi			
Arabic	Polish			
Chinese	Portuguese			
French	Punjabi			
German	Romanian			
Greek	Russian			
Hebrew	Sanskrit			
Hindi	Slovak			
Italian	Spanish			
Japanese	Swahili			
Korean	Turkish			
Latin	Ukrainian			
Lithuanian	Urdu			
Pashto	Vietnamese			

Endorsements differ from Instructional Certificates in that they focus on a topic and are intended to add value to an Instructional Certificate. There is never a requirement from the Department's regulations for a teacher to have a particular endorsement, they are voluntary, however a school district could require an endorsement when posting a position. PA Department of Education regulation 22 Pa Code § 49.62b specify the characteristics and focus of endorsements. Those regulations are authorized under section 2603-B of the Public School Code of 1949 (24 P. S. § 26-2603-B). According to the Department's website,

An Endorsement is a credential attained through an approved program. It is a short program not to exceed 12 credits and is available in new and emerging areas where formal certification does not exist. The Program Endorsement is intended to improve a teacher's skill in dealing with complex classroom settings. These endorsements are added to existing Level I or Level II Certificates but are not required to perform service in the endorsed areas

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⁹⁹ "Certificates in Pennsylvania Types and Codes," PA Department of Education, accessed May 6, 2019, https://www.education.pa.gov/Educators/Certification/PAEducators/Pages/PACerts.aspx

Table 3
Endorsements
Autism Spectrum Disorders PK-12
Creative Movement PK-12
Gifted PK-12
Instructional Coach PK-12
Mathematics Coach PK-12
Online Instruction Program PK-12
Science, Technology, Engineering & Math (STEM) PK-12
Skills for Teacher Leaders PK-12
Social, Emotional and Behavioral Wellness of PK-12 Students
Theatre PK-12

Table 4 details the supplemental areas that can be added on to an instructional certificate through a content test. With the exception of the Grades 5-6 Instructional Add-On, the other subject areas can be added to any instructional certificate.

Table 4				
Acceptable Testing Add-C	n Instructional Subject Areas			
Agriculture PK-12	Art Education PK-12			
Biology 7-12	Business, Computer & Info Technology PK-12			
Chemistry 7-12	Citizenship Education 7-12			
Communications 7-12 Earth and Space Science 7-12				
English 7-12	Environmental Education PK-12			
Family & Consumer Science PK-12	Foreign/World Languages PK-12 (specific)			
General Science 7-12	Grades PK-4			
Health Education PK-12 Library Science PK-12				
Marketing Education PK-12	Mathematics 7-12			
Music Education PK-12	Physics 7-12			

Safety/Driver Education 7-12	Social Studies 7-12		
Grades 4-8 (all subjects 4-6, English Language Arts and Reading 7-8)			
Grades 4-8 (all subjects 4-6, Mathematics 7-8)			
Grades 4-8 (all subjects 4-6, Science 7-8)			
Grades 4-8 (all subjects 4-6, Social Studies 7-8)			
Grades 5-6 (can be added to Grades PK-4 subject area only)			

Source: Pennsylvania Department of Education, "Acceptable Testing Add-On Instructional Subject Areas," accessed May 16, 2019.

https://www.education.pa.gov/Educators/Certification/PAEducators/Pages/Acceptable-Testing-Add-On-Instructional-Subject-Areas.aspx.

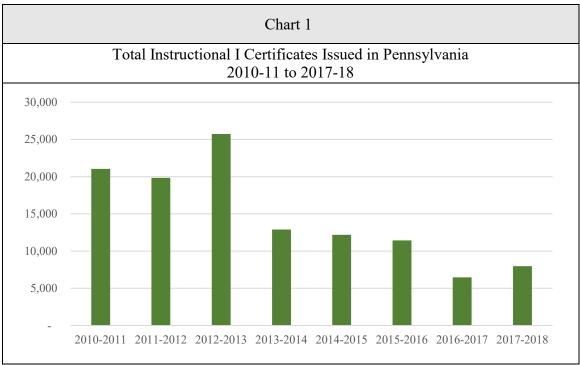
Certification Data for Pennsylvania

In March of 2019, the Department of Education posted on their website the information that was required in Act 82 of 2018. The following tables and charts show selected aggregated data.

Table 5						
Nı	umber of Instructiona 20	al I Certificates Issue 10-11 to 2017-18	d in Pennsylvania			
Year	In-State	Out-of-State	Add-Ons	Total		
2010-2011	15,031	2,080	3,934	21,045		
2011-2012	13,503	1,396	4,939	19,838		
2012-2013	16,614	2,343	6,771	25,728		
2013-2014	9,893	1,290	1,724	12,907		
2014-2015	8,751	1,329	2,102	12,182		
2015-2016	8,271	1,402	1,763	11,436		
2016-2017 4,412 992 1,055 6,459						
2017-2018	5,842	1,076	1,052	7,970		

Source: Prepared by JSGC staff from data in Act 82 of 2018: Report on Educator Preparation and Certification, PA Department of Education, https://www.education.pa.gov/Data-and-Statistics/Pages/Act82.aspx, accessed March 6, 2019.

New teachers in Pennsylvania have to apply to the Department of Education for an Instructional I certificate in order to teach in the Commonwealth. Instructional I Certificates are temporary/provisional certificates valid for up to 6 years. At that time, a teacher has to complete the requirements and apply for an Instructional II Certificate. The column for out-of-state certifications refers to people who have received a four-year teaching degree in an out-of-state institution but passed the Pennsylvania certification process and been issued a certificate by the Secretary of Education to teach within the Commonwealth. Between 2010-2011 and 2017-2018, the total number of Instructional I Certificates issued by the Department of Education decreased by 62 percent. Mirroring this, the number of in-state Instructional I Certificates issued dropped by 61 percent.

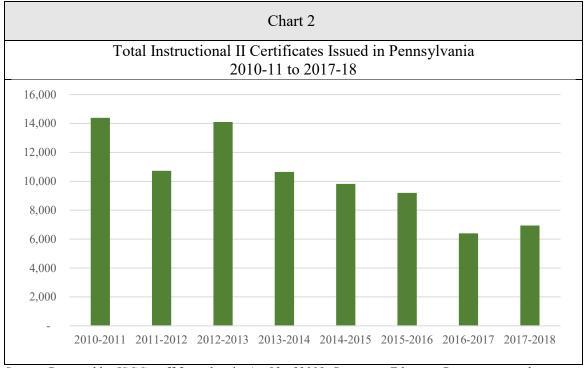


Source: Prepared by JSGC staff from data in Act 82 of 2018: Report on Educator Preparation and Certification, PA Department of Education, accessed March 6, 2019.

Table 6						
Nı	Number of Instructional II Certificates Issued in Pennsylvania 2010-11 to 2017-18					
Year	Year In-State Out-of-State Add-Ons Total					
2010-2011	13,165 46 1,178 14,389					
2011-2012 9,286 33 1,406 10,725						
2012-2013 12,093 60 1,946 14,099						
2013-2014	10,125	34	493	10,652		

2014-2015	8,809	38	970	9,817
2015-2016	8,538	29	633	9,200
2016-2017	6,023	16	364	6,403
2017-2018	6,472	16	452	6,940

Source: Prepared by JSGC staff from data in Act 82 of 2018: Report on Educator Preparation and Certification, PA Department of Education, accessed March 6, 2019.



Source: Prepared by JSGC staff from data in Act 82 of 2018: Report on Educator Preparation and Certification, PA Department of Education, accessed March 6, 2019.

Data on the number of Instructional II Certificates issued by the Department closely mirrors data on Instructional I Certificates. In 2010-11, the Department issued a high of 14,389 permanent certificates. This number has dropped to 6,940 in 2017-18.

	Table 7							
	Number o	f Instruction	onal I Certi 2010-1	ificates Iss		ect Subject	Areas	
Subject Area	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	2016- 2017	2017- 2018
Early Childhood N-3	1,204	1,095	990	15	0	0	0	0
Elementary K-6	6,199	5,521	5,921	43	0	0	0	1
Middle Level Citizenship 6-9	206	257	492	5	0	0	0	0
Middle Level English 6-9	598	792	1,245	19	0	0	0	0
Middle Level Math 6-9	1,085	1,239	1,806	7	3	0	0	0
Middle Level Science 6-9	371	417	692	5	1	0	0	0
Total	9,663	9,321	11,146	94	4	0	0	1
Grades PK-4	5	64	1,124	3,311	3,529	2,511	2,029	2,540
Grades 4-8 English	0	2	90	208	327	390	188	192
Grades 4-8 Science	7	7	118	177	195	176	118	118
Grades 4-8 Math	3	14	72	287	318	383	204	217
Grades 4-8 Social Studies	1	5	59	134	159	159	84	99
Grades 5-6	0	0	0	0	79	79	178	254
Total	16	92	1,463	4,117	4,536	4,698	2,801	3,420

Source: Prepared by JSGC staff from data in Act 82 of 2018: Report on Educator Preparation and Certification, PA Department of Education, accessed March 6, 2019.

Table 7 compares the number of Level I Certificates that the Department has issued before and after the change in certification grade bands but excluded all certifications other than the early childhood, elementary and middle certificates. The drop in the overall number of certificates, from a high of 11,146 in 2012-13 to a low of 2,801 in 2016-17, is staggering. Proportionately more people are choosing the current Grades PK-4 certification than chose the Early Childhood N-3 certification prior to 2013. Also striking is the decrease in the number of new teachers that are certificated to teach 5th and 6th grade. In 2017-18, the Department issued 880 total Level I Certificates for any of the Grades 4-8 subjects and the Grades 5-6 Add-On. By comparison, for 2012-13, the Department issued 10,156 Level I Certificates to combined Elementary K-6 and all of the Middle Level certificates.

Emergency Certification

When a district or LEA cannot find a fully qualified and properly certified educator holding a valid and active certificate, they request an Emergency Permit through the PDE. The person seeking to fill the initial Emergency permit spot must hold, at a minimum, a bachelor's degree. ¹⁰⁰ An emergency permit is valid from the first day of the month that it is issued until the last day of summer school in that school year. Emergency permits may not be issued to those holding expired intern certificates in the subject area requested or a lapsed Level 1 certificate.

There are five different types of emergency permits referred to as Type 1, Type 2, Type 4, Type 6 and Type 8. Type 1 emergency permits refer to vacated positions that the LEA expects to exceed 20 consecutive days in a single assignment. Because there is anticipation of future employment in that position, there is an educational obligation to the permit. The candidate must enroll in a state-approved certification preparation program. Type 2 permits refer to Act 97 waivers. Act 97 waivers apply when an individual is facing furlough or has already been furloughed. In that case, the emergency permit allows the individual to work in an area in which they are not certified for one calendar year. Type 4 emergency permits are for long-term substitutes (the position will exceed 20 consecutive days), however, because the LEA does not anticipate future employment in that position, there is no educational obligation for the candidate applying for emergency certification. Type 6 emergency permits are for day-to-day substitutes and Type 8 emergency permits are for teacher or cultural exchanges. See Table 8 below.

Table 8							
Number of Emergency Permits Issued in Pennsylvania 2010-11 to 2017-18							
Year	Year Type 1 Type 2 Type 4 Type 6 Type 8 Total						
2010-2011 1,221 6 624 12,800 8 14,659							
2011-2012	519	4	377	8,594	17	9,511	

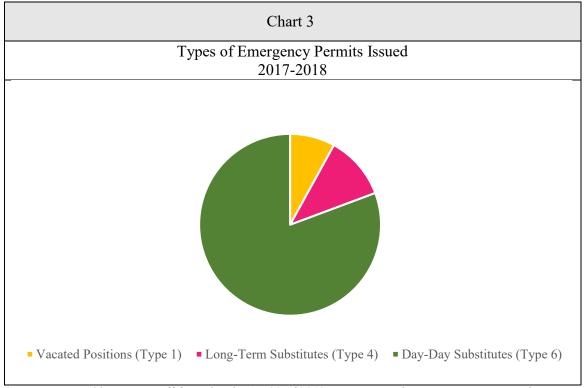
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¹⁰⁰ Regulations guiding LEAs and the Department regarding emergency permits are found in 22 PA Code chapter 49, Certification of Professional Personnel. In particular, 49.31 thorough 49.34 deal with emergency permits and lay out the approach for the Department and the LEA. There are exceptions for those working in LEAs who are dental hygienists, school nurses and in vocational instructional areas.

2012-2013	700	3	514	8,036	16	9,269
2013-2014	641	1	524	7,623	23	8,812
2014-2015	755	1	622	7,570	14	8,962
2015-2016	962	3	1,009	12,358	25	14,357
2016-2017	1,111	3	1,861	15,223	18	18,216
2017-2018	1,568	5	2,215	15,798	10	19,596

Source: Prepared by JSGC staff from data in Act 82 of 2018: Report on Educator Preparation and Certification, PA Department of Education, accessed March 6, 2019.

Of the different types of emergency permits, day-to-day substitutes (Type 6) permits are issued most frequently by the Department; they consistently make up between 80 percent to 90 percent of the emergency permits issued from 2010-2011 to 2017-2018. The number of long-term substitutes (Type 4) permits have grown from 4.26 percent of the total permits issued in 2010-2011 to 11.30 percent in 2017-2018. The issuance of vacated positions (Type 1) permits has remained a more stable piece of the overall pie, starting at 8.33 percent in 2010-2011, then falling to a low of 5.46 percent in 2011-2012 and rising to 8 percent in 2017-2018. Act 97 waivers and teacher or culture exchange permits (Type 2 and Type 8 respectively) have never risen higher than 1 percent of the emergency permits issued in any given year. In the pie chart below, Emergency permits Type 2 and Type 8 do not show up as part of the chart with five and 10 permits issued of the total of 19,596 for the year.



Source: Prepared by JSGC staff from data in Act 82 of 2018: Report on Educator Preparation and Certification, PA Department of Education, accessed March 6, 2019.

NATIONAL TRENDS IN TEACHER CERTIFICATION GRADE SPANS

The National Council on Teacher Quality (NCTQ) compiled information on all 50 states and the District of Columbia on teacher license grade spans and age limitations based on information available as of November 2017. The full table is contained in Appendix A.

The NCTQ information is organized into 6 different categories: Early childhood licenses, Early childhood licenses that span elementary grades, Elementary licenses, Middle School Licenses, Secondary Licenses and Special Education Licenses. The scope of this report does not include special education licenses, so they are not included as a table. The Early Childhood license that span elementary grades column of the NCTQ data is not included as a separate table below because, with only one exception, each of those grade spans were included in either Early Childhood licenses or Elementary licenses. ¹⁰¹

The groupings are meant as a broad picture, providing a general lay of the landscape. In the formation of their early childhood, elementary, middle school and secondary teacher licensing, states have use almost every possible permutation of grade groupings. The tables below include only those grade band groupings that have two or more states. By dropping those certification bands that are unique, the tables highlight the more common licensing spans amongst the 50 states. Because grade spans only used by one state are dropped, the number of states does not add up to 50.

- 39 -

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 $^{^{101}}$ Maine's K-3 licenses did not appear in either the "Early childhood licenses" column or the "Elementary licenses" column.

Map 1
United States Early Childhood
Certification Grade Bands

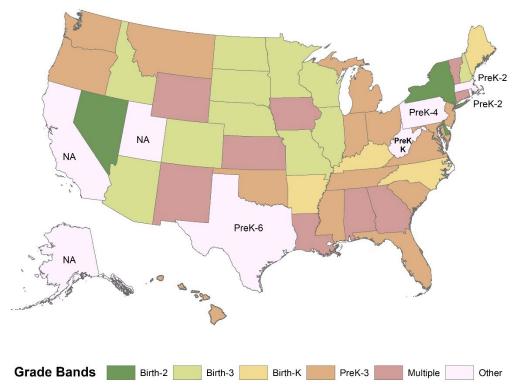


	Table 9								
	Early Childhood Licenses in the United States								
Grade Spans	Birth to PreK	Birth to K	Birth to grade 2	Birth to Grade 3	Birth through age 5	Birth through age 8	PreK-K	PreK-2	PreK-3
Nr. of States	2	7	3	13	2	3	3	2	20

Source: Data compiled by National Council on Teacher Quality (NCTQ). Table prepared by JSGC staff.

The early childhood licenses have two distinct starting points; birth or Prekindergarten. Thirty states have a certificate that uses birth as the start and twenty-five states have a certificate that begins at Prekindergarten. It is also notable that 11 states have multiple early childhood licensure spans (some even have three) while a couple of states do not have an early childhood license.

The most common early childhood license, by far, is the PreK-3 grade span with 20 states. The next two most frequent grade bands start with birth. Thirteen states use Birth to Grade 3 and seven states use Birth to kindergarten.

Map 2
United States Elementary Teacher
Certification Grade Bands

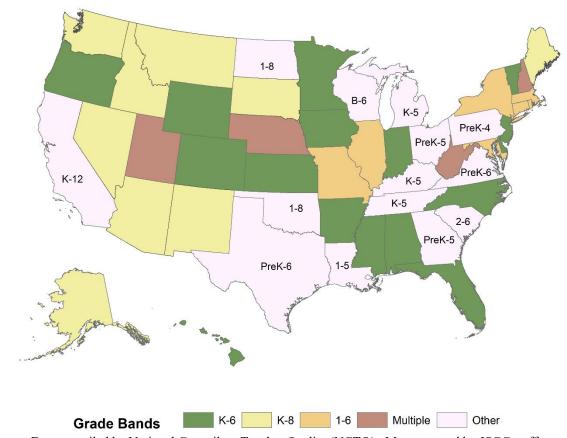


Table 10							
Elementary Licenses in the United States							
Grade Spans	PreK-4	Grades K-5	PreK-6	Grades K-6	Grades 1-	Grades K-8	Grades 1-
Nr. of States	2	3	2	20	8	11	3

For Elementary license grade spans among the 50 states, Grades K-6, which is shaded in dark gray, is the most common certification band, and is used in 20 states. The next two most common grade spans after the K-6 license are shaded in light gray and are fairly evenly split. Eleven states have Grades K-8 licenses and eight states have a Grades 1-6 grade license. Thirty-nine states have one of those three specific elementary licenses. In the US map depicting elementary licenses, elementary licenses that go through the 8th grade are more common in the western portion of the US.

Map 3
United States Middle School
Certification Grade Bands

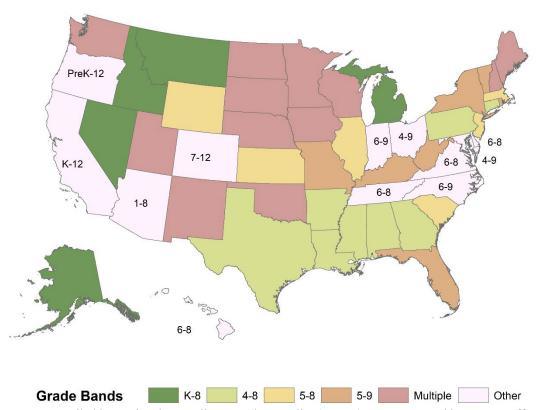


Table 11								
	Middle School Licenses in the United States							
Grade Spans	Grades K-8	Grades 1-8	Grades 4-8	Grades 4-9	Grades 5-8	Grades 5-9	Grades 6-8	Grades 6-9
Nr. of States	11	5	10	3	11	9	2	2

When the middle school certification grade bands are dropped that only have one state in them, the bulk of states are primarily split within three different middle school grade spans. There are eleven states that use a K-8 license as their middle school license. The NCTQ data includes Grades K-8 as a distinct middle school license and also as an elementary license. This highlights the difficulty of categorizing and clarifying states approaches to certification grade spans. Some states have an elementary license K-8 and then have distinct and narrow middle school licenses. Arizona is an example of a states that has a K-8 elementary license. However they have two separate middle school licenses, a 1st - 8th grade license and a 5th - 9th grade endorsement. Multiple states have the K-8 as a middle school license but with an endorsement. To find information on which states include endorsements as part of a middle school license, refer to Appendix A. Ten states have middle school licenses that span from Grades 4-8 and eleven states have a license that spans from Grades 5-8.

Map 4
United States Secondary School
Certification Grade Bands

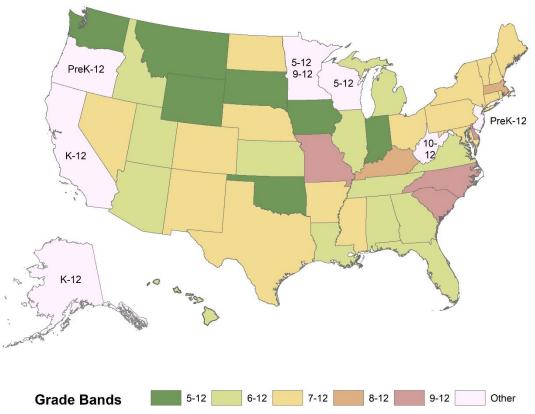


	Table 12					
	Secondary Licenses in the United States					
Grade Spans	Grades 5-12	Grades 6-12	Grades 7-12	Grades 8-12	Grades 9-12	Grades K-12
Nr. of States	8	13	18	3	4	3

Source: Data compiled by National Council on Teacher Quality (NCTQ). Table prepared by JSGC staff.

In Secondary licenses, there are three grade spans that are seen most frequently. Grades 7-12 is the most common grade span, with eighteen states using those grade spans for their licenses. Thirteen states have a Grades 6-12 license and eight states have a Grades 5-12 license.

While these tables highlight grade spans that are more common, the individual states table in the appendix gives the full scope of the variety of certifications bands amongst all fifty states and the District of Columbia. Some states have broad bands, while other states have narrower grade spans. Yet in addition to these distinctions, some states offer overlapping certifications, so that while they have a broad certification, they also have an additional narrow certification.

A significant caution in the use of this data for comparisons is that it does not reflect Add-Ons or Supplemental Certifications that have been created by states in addition to their stated Instructional Certifications. There is a lot of variation and detail in each states teacher certification bands, independent of endorsements or Supplemental Add-On Certifications. But those endorsements and Add-On Certifications have a big impact in which classroom, practically speaking, a person can teach.

OTHER STATES: CHANGES IN CERTIFICATION GRADE SPANS

A more in-depth look at a small number of states' recent historical changes can be instructive. Data was obtained from surrounding states, as well as California, which was chosen because of its unique approach and large student population.

Maryland

In 2017, the state of Maryland had four licenses: a PreK through 3rd grade early childhood license, a 1st through 6th grade, elementary license, a 4th through 9th grade middle school license and a 7th through 12th grade secondary license. The elementary license also allows elementary teacher to teach in departmentalized middle schools if not less than 50 percent of the teaching assignment is within the elementary education grades. In 2007, ten years prior, the grades bands were the same in Maryland. Prior to these bands, the secondary grade band was 5th through 12th and there was no middle school license. 102

West Virginia

In 2017, the state of West Virginia had the following license: a PreK through kindergarten early childhood license, two elementary licenses, a K through 6th grade license as well as a K through 4th grade licenses, a middle school license that is 5th through 9th grade and then a 10th through 12th grade secondary license. According to the Office of Certification and Professional Preparation in the West Virginia Department of Education, these grade bands have been in place since prior to 2000.103

Ohio

In 2017, Ohio had a PreK through 3rd grade early childhood license, a 4th through 9th grade middle school license, and a 7th through 12th grade secondary license. To receive a supplemental license to teach an additional subject, a teacher's district has to approve the position, agree to provide a mentor, and the teacher has to agree to teach in that license area for two years. In 2020, the early childhood grade band will expand to

¹⁰² Communication between JSGC Staff and Kelly Meadows, M.S. Branch Chief, Maryland State Department of Education Division of Educator Certification and Program Approval via e-mail dated December 7, 2018.

¹⁰³ Communication between JSGC Staff and Robert Hagerman, Executive Director Office of Certification and Professional Preparation, West Virginia Department of Education via e-mail dated February 5, 2019.

encompass the 4th and 5th grades. ¹⁰⁴ The Ohio Department of Education cited a desire for School Superintendents to have greater flexibility assigning teachers as one of the motivations for the change. ¹⁰⁵

Through the 1970s and 1980s Ohio had only had three certification bands: K-3, 1-8, and 7-12. ¹⁰⁶ By the 1990s Ohio had added a certification only usable for Prekindergarten and created a middle school license covering grades 4-9. ¹⁰⁷ After 1998, the state revamped its early childhood license covering grades PreK-3. ¹⁰⁸ The decision was made at the behest of experts and stakeholders throughout Ohio to improve student outcomes. An add-on for the early childhood license for grades 4 and 5 was created in 2008.

California

Unlike many of the other states certification policies reviewed for this report, California's teacher certification process eschews traditional grade bands in favor of focusing on subject mastery. Currently, California offers over 22 single subject teaching credential which can be used to teach a subject at every level of education from Preschool through 12th grade, to adult oriented classes. ¹⁰⁹ Alternatively, teachers have the option to pursue a multiple-subject teaching credential which would cover subjects most commonly taught in elementary schools or core classes of grades 5-8, however a teacher holding the Multiple-subject teaching credential is not necessarily limited to teaching only these grades. ¹¹⁰ After meeting the requirements, preliminary certifications teachers have up to five years clear the certification by completing additional requirements.

California has held a K-12 certification grade bands since the "Teacher Preparation and Licensing Act of 1970", also known as the Ryan Act. While there was an effort in the 1990s to create a middle grade credential, it was ultimately rejected by the Commission on Teacher Credentialing which prioritized allowing employers to choose from the broadest possible pool of applicants in order to keep classroom sizes small. ¹¹¹

¹⁰⁴ Communication between JSGC Staff and Jennifer Stump, Policy Staff, Office of Policy and Legislative affairs. Maryland Department of Education via phone call dated May 17th, 2019.

 $^{^{105}}$ Id

¹⁰⁶ Communication between JSGC Staff and Lynne Odorizzi, Education program specialist at the office of educator licensure. Ohio Department of Education via e-mail dated May 10th, 2019.
¹⁰⁷ Id

¹⁰⁸ *Id*.

¹⁰⁹ State of California Commission on Teacher Credentialing, "Single Subject Teaching Credential Requirements for Teachers Prepared in California," March 2019. https://www.ctc.ca.gov/docs/default-source/leaflets/cl560c.pdf?sfvrsn=16.

¹¹⁰ State of California Commission on Teacher Credentialing, "Multiple Subject Teaching Credential Requirements for Teachers Prepared in California," July 2018. https://www.ctc.ca.gov/docs/default-source/leaflets/cl561c.pdf?sfvrsn=12.

Mary Vixie Sandy, "Timing is everything: Building State Policy on Teacher Credentialing in an Era of Multiple, Competing, and Rapid Education Reforms," *Issues in Teacher Education* 15 No. 1 (Spring 2006) pp.13-14. https://files.eric.ed.gov/fulltext/EJ796278.pdf.

Delaware

Starting in the year 2000, Delaware overhauled their licensing and certification system. Teachers were required to have both a state license and a certificate to teach in the state. By 2003, Delaware issued certifications for early care and education teachers, primary teachers (K-4), and Middle level teacher (5-8). High school grades were represented by single subject certifications that could also be used to teach lower level courses. In 2006 the single subject certifications were revamped as a series of secondary license. Currently Delaware offers certifications covering grades Birth-2, K-6, 6-8, and 9-12 certifications for specific subjects. Secondary level certifications can still be used to teach middle level classes.

New Jersey

New Jersey has experienced a dramatic overhaul of their teacher certification system during the last 20 years. In 2000, a New Jersey Supreme Court case required that the state create a Preschool through 3rd grade certificate. 112 Implementation was troubled since New Jersey only offered a Nursery through Grade 8 certification. 113 To compliment the new early education certificate, the K-5 certification was created. In 2008, The State phased out the remnants of the old system K-8 certification and expanded their elementary certification to K-6 which is still in use today. 114 The majority of certificates offered by New Jersey are single-subject spanning the grades Pre K-12. For teachers specializing in middle school, the state offers co-certificates for grades 5-8 which must be used in conjunction with one of the single subject certifications.

New York

New York state certification regulations were last overhauled in 2004. Part of this change involved revising its certification structure from Provisional and Permanent certificates to Initial and Professional certificates. The biggest change of the time was New York stopped issuing a PreK-6 certificate, replacing it with an early childhood certificate spanning Birth- 2 and a Childhood Education certificate covering grades 1-6. 115 Middle level certificates range from Grades 5-9 and Secondary schools are from 7-12. New York State also offers certification extensions for middle level general education with either Grades 5-6 or 7-9 options.

Virginia

Virginia's grade spans have been fairly stable compared to other states reviewed for this study. In 1993 Virginia offered licenses specializing in NK-3, 3-6, 6-8, and

¹¹² Abbott v. Burke, 748 A.2d 82 (N.J. 2000).

¹¹³ Cynthia Rice and Jill McLaughlin, "Providing Tools Towards Quality: The Status of P-3 Teacher Preparation Programs in New Jersey," Foundation for Child Development, June 2010. https://www.fcd-us.org/providingtools-towards-quality-the-status-of-p-3-teacher-preparation-programs-in-new-jersey/.

¹¹⁴ New Jersey Admin. Code § 6A:9B-10.2.

¹¹⁵ Communication between JSGC Staff and Stacey Reid, Education Credential Specialist 2, TCERT, New York Department of Education via email dated April 3, 2019.

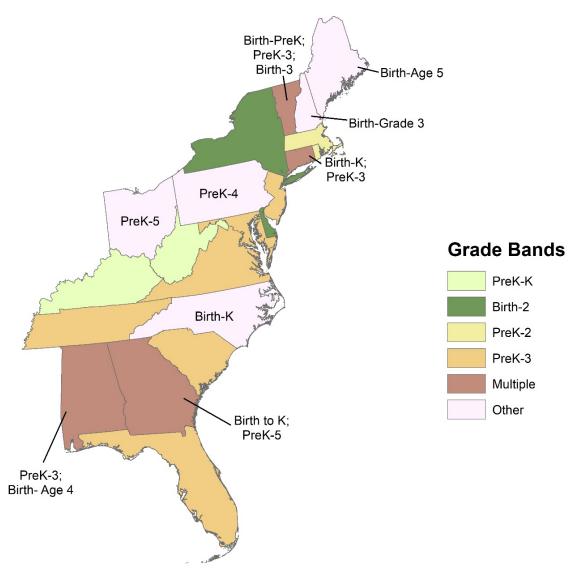
secondary / NK-12 Subject areas (N stands for nursery). While Virginia has modified their licensing process numerous times over the last two decades, they have kept the grade spans functionally the same since 1998 when they began offering licenses to teach early childhood PreK-3, Elementary PreK-6, Middle level 6-8, and Secondary 6-12 grade bands. While these bands overlap significantly, the preparation for each certification level is designed specifically to teach a certain age range. Virginia also offers an add-on endorsement for Early Childhood 3-4 year olds.

Maps 5 through 8 below contrast the certification bands in those states that are geographically close to Pennsylvania.

Vol. 9 Va. Reg. Regs. p. 1733 (February 22, 1993).
 http://register.dls.virginia.gov/vol09/iss11/v09i11.pdf.
 Vol. 14 Va. Reg. Regs. pp. 1513-43 (February 2, 1998).
 http://register.dls.virginia.gov/vol14/iss10/v14i10.pdf.

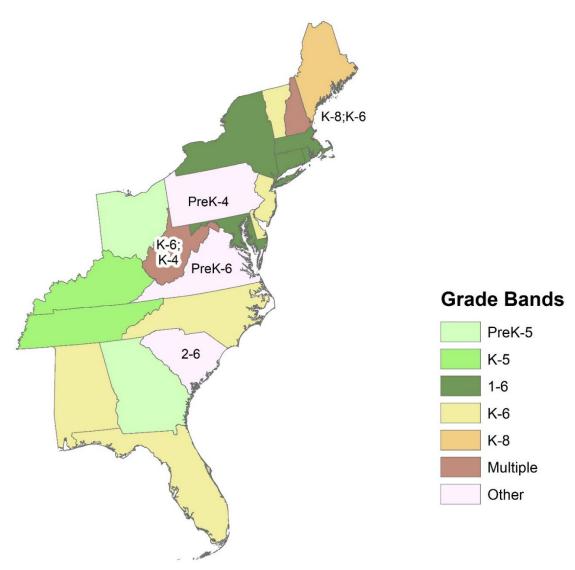
Map 5

East Coast Early Childhood
Certification Bands



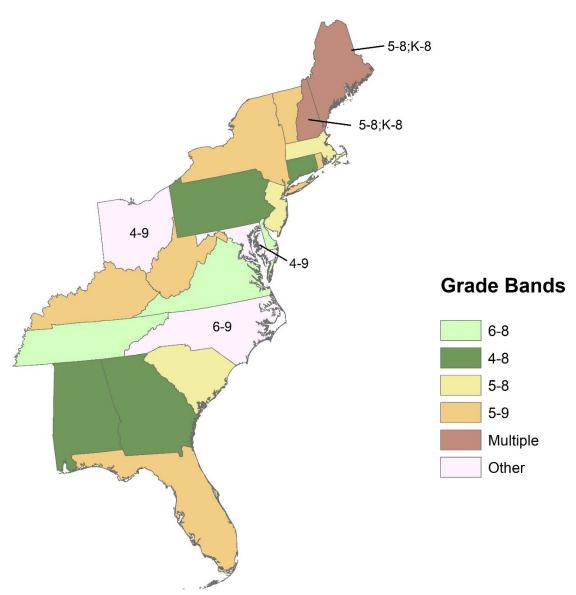
Map 6

East Coast Elementary Teacher
Certification Bands



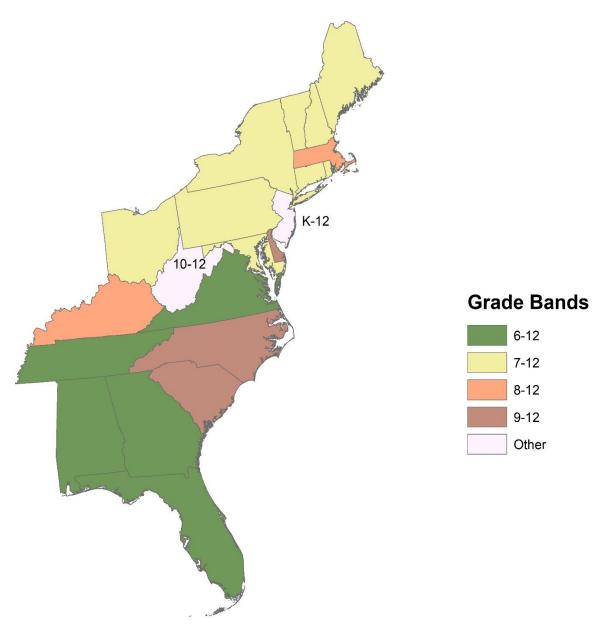
Map 7

East Coast Middle School
Certification Grade Bands



Map 8

East Coast Secondary School
Certification Grade Bands



Teacher supply and demand is a complex topic. On the one hand, the school-aged population may increase or decrease while the economy can cause the tax revenue funding the school budget to shrink or grow, allowing hiring or necessitating teacher furloughs. The number of college students choosing to enroll in teacher preparation programs fluctuates. Some teachers remain in the profession their entire career while others pass through the classroom quickly and leave constant openings to be filled and then refilled. While teacher supply and demand is not covered by the resolution, it has been identified as relevant to the issue of the appropriateness of certification bands. Numerous quality studies and papers have been published on this topic; this report will only briefly highlight several national and state issues.

There has been a lot of publicity about teacher shortages. Some of these articles and papers have cited Federal Teacher Shortage Area list. That lists contains school districts, charter schools and the AVTs in each state. However, it is important to keep in mind that the purpose of this list is to provide loan forgiveness to college students on federal loans.

The Learning Policy Institute (LPI) released in 2016 findings of its national analysis of teacher shortages in the U.S. Researchers conclude that the Great Recession, along with possible influences brought by changed policy objectives, led to teacher lay-offs and reductions in school districts' course offerings. Looking at the problem from a basic perspective of supply and demand, LPI estimates that national annual teacher hires will have plateaued at around 300,000 in 2017-2018. Further, some reports show that teacher supply has been in decline for the past decade. LPI reports that teacher education enrollments dropped by 35 percent between 2009 and 2014, with 691,000 new teachers in 2009 and 451,000 new teachers in 2014.

There is strong evidence, however, that there are sufficient numbers of teachers entering the workforce. Professor Richard Ingersoll, at the University of Pennsylvania, reported that the number of teachers increased by 64 percent from 1987-88 to 2015-16, with approximately 500,000 teachers entering the workforce between 2011-12 and 2015-16. The National Center for Education Statistics (NCES) states that school enrollments

¹¹⁸ United States Department of Education, "Teacher Shortage Areas." https://tsa.ed.gov/#/home/.

¹¹⁹ Leib Sutcher, Linda Darling-Hammond, and Desiree Carver-Thomas, "A Coming Crisis in Teaching? Teacher Supply, Demand, and Shortages in the U.S.," *Learning Policy Institute*, September 15, 2016. https://learningpolicyinstitute.org/product/coming-crisis-teaching.

¹²⁰ Richard M. Ingersoll, Elizabeth Merrill, Daniel Stuckey, and Gregory Collins, "Seven Trends: The Transformation of the Teaching Force, Updated October 2018" (CPRE Research Reports, University of Pennsylvania, Consortium for Policy Research in Education, November 1, 2018). https://repository.upenn.edu/cpre_researchreports/108.

will increase by approximately 3 million over the next decade, but that the increase will not drive demand to the extent that teacher attrition will.

According to Ingersoll, attrition, and not increases in student enrollment, will be the largest contributor to demand for teachers in the coming years. The root of the attrition problem is pre-retirement turnover; retention is too low. 121 Attrition is estimated at 8 percent per year by LPI. 122 National statistics show worrisome trends in teacher retention. Slightly more than 20 percent have fewer than 5 years' experience. Nearly 1 in 10 is a novice teacher with fewer than 2 years' experience. More than 30 percent of teachers have no educational background in the subject of their main assignment. 123

Student enrollments in Pennsylvania have shown a downward trend over the most recent five academic years for which data are available, although the decreases are very small relative to overall enrollment. There were 1,757,678 students enrolled in public schools during the 2012-2013 academic year and 1,719,336 enrolled for the 2017-2018 academic year. The 38,342 drop in student enrollment averaged 7,688 students per year over the five year period. This is an overall decrease of students of 2.2 percent. The number of teachers was essentially unchanged over the same five year period. There were 120,370 teachers in the 2012-2013 academic year and 120,681 in the 2017-2018 academic year. The increase of 311 teachers represents a relative increase of approximately 0.26 percent. See Table 13.

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¹²¹ Communication between JSGC Staff and Professor Richard Ingersoll, University of Pennsylvania via telephone May 22, 2019.

¹²² A Coming Crisis in Teaching?, n. 121 at p. 3.

¹²³ Emma Garcia and Elaine Weiss, "The Teacher Shortage is Real, Large and Growing, and Worse Than We Thought," *Economic Policy Institute*, March 26, 2019, p. 6. https://www.epi.org/files/pdf/163651.pdf.

	Table 13				
Pennsylvania Public School Enrollment and Number of Teachers by Academic Year 2012-13 to 2017-18					
Academic Year	Student Enrollment	Teachers			
2012-2013	1,757,678	120,370			
2013-2014	1,750,059	119,270			
2014-2015	1,739,559	119,297			
2015-2016	1,731,588	118,334			
2016-2017	1,722,619	119,763			
2017-2018	1,719,336	120,681			

Source: Pennsylvania Department of Education, "Enrollment Reports and Projections."

https://www.education.pa.gov/Data-and-

Statistics/Pages/Enrollment percent 20 Report spercent 20 and percent 20 Projections. as px.

Source: Pennsylvania Department of Education, "Professional and Support Personnel."

https://www.education.pa.gov/Data-and-Statistics/Pages/Professional-and-Support-Personnel.aspx.

The Learning Policy Institute produced an analysis of data describing a number of variables related to teacher shortages, titled *Understanding Teacher Shortages: 2018 Update, A State-by-State Analysis of the Factors Influencing Teacher Supply, Demand, and Equity.* Data from all 50 states were gathered and analyzed to illustrate two overarching categories related to the teaching profession, the "Teaching Attractiveness Rating," and the "Teacher Equity Rating."

The Teaching Attractiveness Rating is designed to illustrate how attractive each particular state is to teachers. Indicators of attractiveness include Compensation, Working Conditions, Teacher Qualifications, and Teacher Turnover. Each of these indicators is divided into further indicators. Each state's attractiveness rating is the average quintile rank of each of its indicators. Pennsylvania's rank of 4.23 places it second of the 50 states, behind only Wyoming's first place rank 4.57. ¹²⁴ In other words, Pennsylvania is the second most attractive state for teaching.

Determining the extent of Pennsylvania's teacher shortage is difficult to do. LPI defined a teacher shortage as a school district's inability to "staff vacancies at current wages with individuals qualitied to teach in the fields needed." Commission staff sought the

¹²⁴ Learning Policy Institute, "Understanding Teacher Shortages: 2018 Update, A State-by-State Analysis of the Factors Influencing Teacher Supply, Demand, and Equity," August 24, 2018.

https://learningpolicyinstitute.org/product/understanding-teacher-shortages-interactive. ("Teaching attractiveness ratings are calculated by adding the quintile rank of each state on each teaching attractiveness indicator (compensation, teacher turnover, working conditions, and teacher qualifications), then dividing the total by the number of teaching attractiveness indicators available for that state.")

¹²⁵ Emma Garcia and Elaine Weiss, *The Teacher Shortage is Real*, n. 125 at p. 2.

advice of several experts, all of whom faced the same obstacle in the lack of data. For example, some researchers compare the year-to-year ratios of new hires to new certifications to discern hiring trends. State officials in Ohio, for example, use the percentage of classes taught by people who are not properly certified to teach those classes. They caution that the proxy yields an estimate of courses taught and not an estimate of teachers. Professor Ingersoll cautioned against using proxy measurements because they might not present accurate descriptions. Because school districts are required to staff all classrooms, a number of alternative solutions are available to districts. In place of actual numbers, proxy data are used. Nearly all vacant teaching positions are filled by whomever is in the pool of available applicants. In Pennsylvania, one percent of classroom teachers are not certified to teach the subject. In the event that appropriately certified teachers are not available, school administrators may hire people who have emergency certifications.

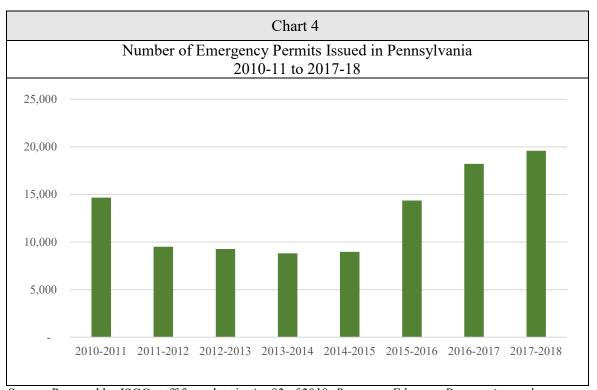
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¹²⁶ New hire may be defined as teachers who are hired with zero years' experience.

¹²⁷ Communication between JSGC Staff and Jennifer Stump and Sophia Hubble, Ohio Department of Education, via telephone May 16, 2019.

¹²⁸ Communication between JSGC Staff and Dr. Ed Fuller, Pennsylvania State University, via telephone May 15, 2019.

The number of emergency permits issued by the Department is one indicator of teacher demand that is not filled through the regular certification process. In 2010-11, the Department issued 14,659 emergency permits. This number decreased to 9,511 in the following year and then further to 8,812 in 2013-14. At that point, the number of permits began to climb, reaching a high of 19,596 in 2017-18.



Source: Prepared by JSGC staff from data in Act 82 of 2018: Report on Educator Preparation and Certification, PA Department of Education, accessed March 6, 2019.

FACILITIES AND ADMINISTRATORS

The configuration of schools is a relevant piece of the puzzle surrounding teacher certification grade spans. Although the grades contained within a school should not be the cart leading the horse that determine if specific grades should be within different certification bands, they impact a principal's ability to manage teacher assignments as student populations change.

After examining data drawn on May 3, 2019 from the Pennsylvania Department of Education's list of "regular" public schools operating within a school district, the commission found the top school configurations for Elementary, Elementary/Secondary, and Secondary categories of schools. ¹²⁹ For the following configurations, "K" denotes the aggregate of prekindergarten, K4, and K5 programs.

The top ten configurations for the elementary level are the following:

Table 14					
	Elementary Schools in Pennsylvania 2018-19 School Year				
Configuration	Number of schools				
K-5	622				
K-6	292				
K-4	209				
K-3	72				
K-2	61				
3-5	35				
5-6	28				
4-6	27				
1-5	24				
K-1	21				

Source: Pennsylvania Department of Education, "EdNA (Education Names and Addresses)," accessed May 3, 2019. http://www.edna.pa.gov/Screens/Extracts/wfExtractPublicSchools.aspx. Table prepared by JSGC staff.

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¹²⁹ Pennsylvania Department of Education, "EdNA (Education Names and Addresses)," accessed May 3, 2019. http://www.edna.pa.gov/Screens/Extracts/wfExtractPublicSchools.aspx.

The top ten configurations for the elementary/secondary level are the following:

Table 15					
	Elementary/Secondary Schools in Pennsylvania 2018-19 School Year				
Configuration	Number of Schools				
6-8	262				
K-8	139				
5-8	71				
6-12	22				
6-7	7				
4-8	5				
K, 9-12	4				
1-8	4				
5-7	4				
3-8	3				

Source: Pennsylvania Department of Education, "EdNA (Education Names and Addresses)," accessed May 3, 2019. http://www.edna.pa.gov/Screens/Extracts/wfExtractPublicSchools.aspx. Table prepared by JSGC staff.

The top configurations for the secondary level are the following:

Table 16					
	Secondary Schools in Pennsylvania 2018-19 School Year				
Configuration	Number of schools				
9-12	400				
7-12	139				
7-8	79				
7-9	14				
10-12	11				
8-12	9				
9-10	2				
7	2				
8	2				
8-9	2				

Source: Pennsylvania Department of Education, "EdNA (Education Names and Addresses)," accessed May 3, 2019. http://www.edna.pa.gov/Screens/Extracts/wfExtractPublicSchools.aspx. Table prepared by JSGC staff.

It should be noted that the aforementioned categories—elementary, elementary/secondary, and secondary—have specific grade spans. Elementary refers to 6th grade and below whereas secondary refers to 7th grade and above. Any school which has overlap of the two categories is classified as Elementary/Secondary.

The data procured shows the grades offered by each school; therefore each school accounted for does not necessarily currently have enrolled students. Furthermore, the data is self-reported by each school and has not been reviewed by the Pennsylvania Department of Education. It should also be clarified that a "school" does not necessarily refer to the brick and mortar building in which educators teach and enrolled students learn each day of the academic year. Rather, a "school" refers to a unique distribution of administrators and students.

The commission analyzed the distribution of Preschool programs throughout the Commonwealth.¹³⁰ The counties with the most Preschool programs were the following, in order: Philadelphia, Allegheny, Erie, Berks, Lancaster, and Lackawanna. The individual cities with the most Preschool programs were the following, in order: Philadelphia, Pittsburgh, Erie, Reading, Scranton, and Lancaster.

The top ten counties with Preschool programs are listed below:

Table 17					
Location of Preschool Program	Location of Preschool Programs within Public School Districts				
County	Number of Schools with Preschool programs				
Philadelphia	70				
Allegheny	39				
Erie	17				
Berks	15				
Lancaster	13				
Lackawanna	12				
York	10				
Beaver	9				
Cambria	9				
Indiana	8				

Source: Pennsylvania Department of Education, "EdNA (Education Names and Addresses)," accessed May 3, 2019. http://www.edna.pa.gov/Screens/Extracts/wfExtractPublicSchools.aspx. Table prepared by JSGC staff.

¹³⁰ For this section "Preschool" refers to both Pre-Kindergarten and K4 programs. For the purposes of this report, half-day and whole-day programs for Preschool and Kindergarten were aggregated.

The top ten cities with Preschool programs are listed below:

Table 18				
Location of Preschool Program	s within Public School Districts			
City	Number of Schools with Preschool programs			
Philadelphia	70			
Pittsburgh	32			
Erie	14			
Reading	12			
Scranton	11			
Lancaster	11			
York	8			
Lebanon	5			
Pottstown	4			
Bethlehem	4			

Source: Pennsylvania Department of Education, "EdNA (Education Names and Addresses)," accessed May 3, 2019. http://www.edna.pa.gov/Screens/Extracts/wfExtractPublicSchools.aspx. Table prepared by JSGC staff.

In total, there are 304 Preschool programs throughout the Commonwealth out of the 2,690 public schools which the data accounts for. Additionally, these 304 Preschool programs occur in 116 out of 436 cities as well as 49 out of 67 counties.

Administrators have to accommodate shifts in student populations and increases or decreases in class sizes and may need to shift staff around in order to do so. School administrators carry the burden of melding the practicalities of the school building, the teaching and administrative staff while working towards student outcomes. One school superintendent stated that his biggest issue, apart from finding secondary special education teachers, was finding elementary teachers for fifth and sixth grade. Since 2013, when the certifications changed, he has hired about 50 elementary teachers, and about 90 percent of them have had the newer PreK-4 certification. His district moves teachers with the older K-6 certification into grades 5 and 6 as needed. According to this administrator, "We clearly overthought this topic on the state level and were doing fine with the K-6 certification. It is the district's responsibility to train staff on various reading programs and strategies." 132

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¹³¹ Communication between JSGC staff and Unnamed Superintendent 1 via e-mail dated May 7 2019. ¹³² *Id.*

Another superintendent stated that the previous K-6 certification bands, gave the districts a lot more flexibility, particularly when they wanted to make staffing changes down the road. According to this superintendent, the PreK-4 certification "handcuffed school districts in the future." In his hiring for the previous year, as a result, he had tried to hire a balance out of his applicant pool of those with newer certification and those with the grandfathered certification. ¹³³ Neither of the superintendents thought that they were dealing with better qualified candidates under the newer certifications.

There seems to be a sharp divide between theory and practice. Administrators interviewed by JSGC staff reported that they could not discern that candidates with the newer certifications were better qualified for the positions that they filled. Lacking either clear or discernable evidence that those teachers are performing better in the classroom, school administrators look at which certification provides more flexibility or which candidate is the right fit with the school community and classroom.

In interviews, several administrators pointed out that professional development is a continuum. The continuum is designed to be rigorous yet supportive in its entirety and is created through a combination of statute and regulation. Act 82 of 2018 focuses on the time a person spends in an institution of higher education. This preparation program is their initial training to enter the teaching profession; it is the beginning of the continuum. After that initial certification, once a person is employed by a public school, there is induction or on-the-job mentoring support from the location education agency (LEA). Permanent certification has mandatory requirements for additional teacher training, (24 college credits), beyond their initial teacher training. These additional credits move a teacher further along the professional development continuum from a Level I Certification and into a permanent Level II Certification. However, although the Level II Certification is permanent, additional professional training is still required through Act 48 of 2018, which requires professional educators to complete certain credits or hours every five years in order to maintain that active certification.

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¹³³ Communication between JSGC staff and Unnamed Superintendent 2 via e-mail dated May 6 2019.

¹³⁴ Act 82 of 2018 (P.L. 30, No. 14); 24 P.S. § 1202.1(c)(1).

Recommendation: The State Board of Education should conduct a study designed to evaluate student performance on standard-based, criterion-referenced state assessments for students in PreK through middle school with teacher certification as the primary variable. The lack of research into the relationship between student outcomes and Pennsylvania's teacher certification grade spans, combined with the precipitous drop in new certifications and the reportedly high rate of preretirement attrition, suggests that the state board would do well to develop new evidence to inform its deliberations. The purpose would be to study and compare student outcomes as influenced by certification grade spans and Add-On instructional certificates as issued by the Department before and after the certification grade span changes in 2013.

Now may be a unique time to conduct this study. With six years since the implementation date and a rebounded economy, school districts have hired teachers certificated in the new certification spans while retaining substantial numbers of teachers whose certifications are grandfathered from the previous grade spans. Delaying the study could result in a potential imbalance of certifications due to teacher retirements and attrition.

Recommendation: The State Board of Education should use the current major review of certification regulations to consider whether it should return to the K-6, 6-9, and 7-12 certification grade spans while maintaining the PreK-4 certificate as an option for those LEAs that want more of a specialized focus on early childhood.

Broadening the grade spans will provide applicants a wider range of employment opportunities while also providing LEAs more flexibility in assigning staff where they are most needed.

Recommendation: The Commonwealth should require that at least 3 credits of coursework completed for Level II certification and/or Act 48 credits be in cognitive development of the grade span/age range in which a teacher is employed.

It is important for teachers to have a strong foundation in the pedagogy or stages of development for the age group that they teach. Recognizing that professional development is a continuum and that teachers move grade spans based on personal preference and district need, the immediate professional development opportunities should include one course that narrowly focuses on the cognitive development of the specific age group where the teacher is employed.

Recommendation: The Department of Education should continue to refine its data collection with an emphasis on strategic policy development, completeness, reliability, and functionality that can be consistently maintained in years to come.

Accurate and reliable data should be available to policymakers, school leadership, advocacy groups, and the general public so that informed policy is data driven. The Commission had a hard time finding certain basic data that would have been useful to further understanding of the current state of teacher certification in the Commonwealth.

Recommendation: The Department should ensure that institutions of higher education with teacher preparation programs are emphasizing age appropriate pedagogy. In particular, ensure in section 354.32 (Monitoring and assessment) and section 354.33 (Professional competency) that teaching candidates demonstrate competency in age appropriate pedagogy and understand the theories of learning in age appropriate sequences.

Although it is outside the purview of this study, the Commission acknowledges how crucial teacher preparation programs are to the quality of education and student outcomes. Preparation programs need to prioritize giving their students tools to handle the broad range of learning styles in the classroom.

State	Early childhood licenses	Early childhood licenses that span elementary grades	Elementary licenses	Middle School Licenses	Secondary Licenses	Special Education Licenses
Alabama	PreK-3; Birth through age 4	PreK-3	K-6	Comprehensive or single subject for grades 4-8	6-12	PreK-3, K-6 and 6- 12
Alaska	Unclear	Not applicable.	K-8	K-8, Endorsement 6-8	8-12	K-12
Arizona	Birth to grade	Birth to grade 3	K-8	1-8; 5-9 endorsement	6-12	K-12, Birth to grade 3
Arkansas	Birth to K	Not applicable.	K-6	4-8	7-12	K-12
California	Birth to grade 3 specialist license does not appear to be an instructional license but is intended as a resource license.	Not applicable. *	K-12 Multiple Subject	K-12 Multiple Subject or Single Subject	K-12 Single Subject licenses	K-12
Colorado	Birth through age 8	Birth through age 8	K-6	7-12	7-12	Birth to grade 3; K- 12
Connecticut	Birth to K; PreK-3	PreK-3	1-6	4-8	7-12	K-12, Birth to kindergarten(1)
Delaware	Birth to grade 2	Birth to grade 2	K-6	6-8	9-12	Birth to grade 2; K- 12
District of Columbia	PreK-3	PreK-3	1-6	4-8	7-12	PreK-3; K-12
Florida	PreK-3	PreK-3	K-6	5-9	6-12	K-12
Georgia	Birth to K; PreK-5	Not applicable.	PreK-5	4-8	6-12	PreK-5; PreK-12
Hawaii	PreK-3	PreK-3	K-6	6-8	6-12	PreK-3; K-6; 7-12; K-12
Idaho	Birth to grade 3	Blended early childhood/early childhood special education Birth to grade 3	K-8	K-8 license; Subject area endorsement needed to teach a single subject through grade 9	6-12	Birth to grade 3; K- 8; 6-12; K-12; PreK-3 endorsement can be added to a K-12 license
Illinois	Birth to grade	Birth to grade 3	1-6	5-8	6-12	K-12; Birth to grade 3
Indiana	PreK-3	PreK-3	K-6	6-9	5-12	PreK-3; K-6; 5-9; 5- 12; PreK-12
Iowa	PreK-K; Birth through grade 3; PreK-3	Birth to grade 3; PreK-3	K-6	5-8 endorsement added to a K-6 or 5-12 license	5-12	K-8; 5-12

Kansas	Birth to K; Birth to grade	Birth to grade	K-6	5-8	6-12	K-6; 5-8; 6-12; K- 12
Kentucky	Birth to K	Not applicable.	K-5	5-9	8-12	PreK-12, K-12
Louisiana	Birth to K; PreK-3	PreK-3	1-5	4-8	6-12	1-5; 4-8; 6-12
Maine	Birth to age 5	K-3	K-8	5-8; K-8	7-12	Birth to age 5; K- 8; 7-12
Maryland	PreK-3	PreK-3	1-6	4-9; Elementary teachers may also teach in departmentalized middle schools if not less than 50 percent of the teaching assignment is within the elementary education grades.	7-12	Birth to grade 3; 1- 8; 6-12
Massachusetts	PreK-2	PreK-2	1-6	5-8	8-12	PreK-2; PreK-8; 5- 12
Michigan	PreK-3	PreK-3	K-5	K-8 (self- contained only); May also teach single subjects on a secondary license or by adding an endorsement to an elementary license for grades 6-8.	6-12	K-12
Minnesota	Birth to grade 3	Birth to grade 3	K-6	Teachers with K- 6 license may teach grades 7-8 in self-contained classrooms; Teachers with secondary licenses may also teach single subjects in grades 7-8; Grades 5-8 endorsements offered in communication arts and literature, mathematics, social studies and general science	Single-subject secondary for mathematics, communication arts and social studies 5-12 or science fields 9-12	Birth to grade 1; K- 12
Mississippi	PreK-K	Not applicable.	K-6	4-8; Supplemental 7- 8 endorsement	7-12	K-12, The state also offers mild to moderate disability endorsements (K-8 and 7-12) that can be added to an elementary or secondary license.

Missouri	Birth to grade	Birth to grade	1-6	5-9	9-12	K-12 Elementary
1/11/3/3/411	3	3	10	٥	, 12	or K-12 Middle/Secondary; Birth to grade 3
Montana	PreK-3	PreK-3	K-8	K-8 and 4-8 endorsement	5-12	PreK-12
Nebraska	Birth to grade 3; PreK-3 endorsement can only be added to a K- 6 license.	PreK-3 or K-6 with Early Childhood Inclusive endorsement.	K-8; K-6	5-9; K-8 (self- contained only)	7-12	K-12; Birth to grade 3; K-6; 7-12
Nevada	Birth to grade 2	Birth to grade 2	K-8	Middle school licenses do not have a specific grade span, but allow teachers to teach in any middle school or junior high school setting; K-8	7-12	K-12; PreK-3
New Hampshire	Birth to grade 3	Birth to grade 3	K-8; K-6	5-8; K-8	7-12	Birth to grade 3; PreK-12
New Jersey	PreK-3	PreK-3	K-6	5-8	Single-subject PreK-12	K-12 endorsement must be added to an elementary or secondary license that restricts the grade level or subject matter that can be taught.
New Mexico	Birth to PreK; PreK-3	Birth to grade 3	K-8	K-8; 5-9	7-12	PreK-12
New York	Birth to grade 2	Birth to grade 2	1-6	5-9	7-12	Birth to grade 2; 1-6, 5-9; 7-12
North Carolina	Birth to K	Not applicable.	K-6	6-9	9-12	K-12
North Dakota	Birth to grade 3	Birth to grade 3	1-8	5-8; 1-8	7-12	PreK-12
Ohio	PreK-3	Not applicable. *	PreK-3; Teachers may opt to add grades 4-5	4-9	7-12	K-12
Oklahoma	PreK-3	PreK-3	1-8	5-8; 1-8 generalist license (cannot be used to teach middle grades mathematics)	5-12	PreK-12
Oregon	PreK-3 specialization is offered, that can be added to an elementary license but is not required to teach early childhood education.	Not applicable. *	K-6; through grade 8 in self-contained classrooms	PreK-12	PreK-12	PreK-12
Pennsylvania	PreK-4	Not applicable.	PreK-4	4-8	7-12	PreK-8; 7-12

Rhode Island	PreK-2	PreK-2	1-6	5-9	7-12	Birth to grade 2; 1-
						6; 5-8; 7-12
South Carolina	PreK-3	PreK-3	2-6	5-8	9-12	PreK-12; PreK-3
South Dakota	Birth to grade 3	Birth to grade 3	State offers a K-8 elementary program with the following endorsements available:Self- contained kindergarten through fourth grade; Self- contained grades five through eight; or Kindergarten through fourth grade: English language arts, math, science or social studies K-8	5-8 single subject and K-8 (K-4 and 5-8 self- contained)	5-12	Birth to grade 3; K- 12
Tennessee	PreK-3	PreK-3	K-5	6-8	6-12	PreK-3; K-8; 6-12
Texas	These states do not offer a standalone early childhood certification that includes elementary grades, or the state's early childhood certification is the de facto license to teach elementary grades.	Not applicable. *	PreK-6	4-8	7-12	PreK-6; 7-12; PreK- 12
Utah	Utah's early childhood certification, which allows candidates to teach grades K-3, is a de facto license to teach elementary grades.	Not applicable.	K-3; K-6; 1-8	1-8 (in self- contained classrooms); 6- 12	6-12	K-12
Vermont	Birth to PreK, PreK-3, and Birth through grade 3 early childhood education endorsements.	PreK-3, birth to grade 3	K-6	5-9	7-12	PreK-12; and K-8 and 7-12
Virginia	PreK-3	PreK-3	PreK-6	6-8	6-12	K-12; Birth to age

Washington	PreK-3	PreK-3	K-8	4-9; K-8	5-12	K-12 and early childhood special education
West Virginia	PreK-K	Not applicable.	K-6; K-4	5-9	10-12	K-6; 5-12
Wisconsin	Birth to age 8	Birth to age 8	Early childhood to middle childhood license (EC- MC) covers birth to age 11 (grade 6)	Early adolescence through adolescence license (grades 5- 12); Middle childhood through early adolescence level (grades 1- 8)	Early adolescence through adolescence level ages of 10 through 21 (grades 5-12)	Birth through age 8; ages 6-13; ages 10-21
Wyoming	Birth to age five; Birth to age eight (grade 3)	Birth to grade 3	K-6	5-8	5-12	K-6; 5-8; 6-12; K- 12

^{*}These states do not offer a standalone early childhood certification that includes elementary grades, or the state's earlychildhood certification is the de facto license to teach elementary grades.

SENATE AMENDED

PRIOR PRINTER'S NOS. 1970, 2607

PRINTER'S NO. 4070

THE GENERAL ASSEMBLY OF PENNSYLVANIA

HOUSE BILL

No. 1386 Session of 2017

INTRODUCED BY PHILLIPS-HILL, GROVE, D. MILLER, RAPP, TALLMAN, WHEELAND, ZIMMERMAN AND WATSON, JUNE 12, 2017

SENATOR EICHELBERGER, EDUCATION, IN SENATE, AS AMENDED, SEPTEMBER 25, 2018

AN ACT

Amending the act of March 10, 1949 (P.L.30, No.14), entitled "An act relating to the public school system, including certain provisions applicable as well to private and parochial schools; amending, revising, consolidating and changing the laws relating thereto," in certification of teachers, providing for instructional certificate grade spans and age levels AND DUTIES OF DEPARTMENT.

The General Assembly of the Commonwealth of Pennsylvania

hereby enacts as follows:

Section 1. The act of March 10, 1949 (P.L.30, No.14), known as the Public School Code of 1949, is amended by adding a section to read:

Section 1202.1. Instructional Certificate Grade Spans and

Age Levels.--(a) Notwithstanding 22 Pa. Code § 49.85 (relating

to limitations), the grade spans and age levels for

instructional certificates issued after December 31, 2021, shall

be as follows:

(1) Early childhood - prekindergarten, kindergarten, grades
one (1) through four (4) or ages three (3) through nine (9).

- (2) Elementary kindergarten, grades one (1) through six (6) or ages four (4) through eleven (11).
- (3) Middle grades six (6) through nine (9) or ages eleven (11) through fifteen (15).
- (4) Secondary grades seven (7) through twelve (12) or ages eleven (11) through twenty-one (21).
- (5) Specialized areas prekindergarten through grade twelve (12) or up to age twenty-one (21).
- (6) Special education prekindergarten through grade twelve (12) or up to age twenty-one (21). An additional content area shall not be required for a special education certificate issued in accordance with this section.
- (b) Certificates issued in ascordance with 22 Pa. Code § 49.85(a) and (b) shall remain valid for the term of the certificate.
- (c) An individual holding Elementary/Middle Certificates
 issued in accordance with 22 Pa. Code § 49.85(b)(2) shall have
 the opportunity to expand the scope of the individual's
 certificate to meet the grade levels covered under subsection
 (a)(2) and (3) by a process determined by the Department of
 Education, which shall include, but not be limited to,
 continuing education credits or the satisfactory outcome of a
 PRAXIS assessment for the specific certification level.
- (d) An individual holding Special Education-PK-8 and Special Education-7-12 level certificates issued in accordance with 22

 Pa. Code § 49.85(b)(5) and (6) shall have the opportunity to expand the scope of the individual's certificate to meet the grade levels covered under subsection (a)(6) by a process determined by the Department of Education, which shall include,

but not be limited to, continuing education credits or the satisfactory outcome of a PRAXIS assessment for the specific certification level.

SECTION 1202.1. INSTRUCTIONAL CERTIFICATE GRADE SPANS AND AGE LEVELS AND DUTIES OF DEPARTMENT.--(A) THE FOLLOWING SHALL APPLY TO SPECIAL EDUCATION CERTIFICATES:

- (1) NOTWITHSTANDING 22 PA. CODE § 49.85 (RELATING TO LIMITATIONS), THE GRADE SPAN AND AGE LEVELS FOR SPECIAL EDUCATION CERTIFICATES ISSUED AFTER DECEMBER 31, 2021, SHALL BE PREKINDERGARTEN THROUGH GRADE TWELVE OR UP TO TWENTY-ONE (21) YEARS OF AGE. AN ADDITIONAL CONTENT AREA SHALL NOT BE REQUIRED FOR A SPECIAL EDUCATION CERTIFICATE ISSUED IN ACCORDANCE WITH THIS SECTION.
- (2) SPECIAL EDUCATION CERTIFICATES ISSUED IN ACCORDANCE WITH

 22 PA. CODE § 49.85(A) AND (B) SHALL REMAIN VALID FOR THE TERM

 OF THE CERTIFICATE.
- (3) AN INDIVIDUAL HOLDING SPECIAL EDUCATION-PK-8 AND SPECIAL EDUCATION-7-12 LEVEL CERTIFICATES ISSUED IN ACCORDANCE WITH 22
 PA. CODE \$ 49.85(B)(5) AND (6) SHALL HAVE THE OPPORTUNITY TO

 EXPAND THE SCOPE OF THE INDIVIDUAL'S CERTIFICATE TO MEET THE

 GRADE LEVELS COVERED UNDER PARAGRAPH (1) BY A PROCESS DETERMINED BY THE DEPARTMENT OF EDUCATION, WHICH SHALL INCLUDE, BUT NOT BE

 LIMITED TO, CONTINUING EDUCATION CREDITS OR ATTAINING QUALIFYING SCORES ON THE ASSESSMENT MADE AVAILABLE BY THE DEPARTMENT OF

 EDUCATION FOR THE SPECIFIC CERTIFICATION LEVEL.
- (B) THE DEPARTMENT OF EDUCATION SHALL HAVE THE FOLLOWING DUTIES:
- (1) WITHIN SIXTY (60) DAYS OF THE EFFECTIVE DATE OF THIS SUBSECTION:

- CERTIFICATE UNDER 22 PA. CODE § 49.85(B)(1) THAT AN INDIVIDUAL

 HOLDING OR SEEKING AN EARLY CHILDHOOD CERTIFICATE MAY, BY

 ATTAINING QUALIFYING SCORES ON THE ASSESSMENT MADE AVAILABLE BY

 THE DEPARTMENT OF EDUCATION, EXTEND THE GRADE SPAN FOR THE

 INDIVIDUAL'S EARLY CHILDHOOD CERTIFICATE TO INCLUDE GRADES FIVE

 AND SIX AND INCLUDE AND MAINTAIN NOTICE OF THE AVAILABILITY OF

 THE ASSESSMENT ON THE PUBLICLY ACCESSIBLE INTERNET WEBSITE OF

 THE DEPARTMENT OF EDUCATION WITH OTHER INFORMATION DESCRIBING

 CERTIFICATION REQUIREMENTS.
- (II) CREATE A NOTIFICATION FORM TO INFORM AN INDIVIDUAL

 SEEKING AN EARLY CHILDHOOD CERTIFICATE AFTER THE EFFECTIVE DATE

 OF THIS SUBSECTION THAT THE INDIVIDUAL MAY, BY ATTAINING

 QUALIFYING SCORES ON THE ASSESSMENT MADE AVAILABLE BY THE

 DEPARTMENT OF EDUCATION, EXTEND THE GRADE SPAN FOR THE

 INDIVIDUAL'S EARLY CHILDHOOD CERTIFICATE TO INCLUDE GRADES FIVE

 AND SIX. A TEACHER PREPARATION PROGRAM SHALL PROVIDE THE FORM TO

 ALL INDIVIDUALS SEEKING AN EARLY CHILDHOOD CERTIFICATION.
- (2) BY MARCH 1, 2019, AND BY MARCH 1 OF EACH YEAR

 THEREAFTER, ISSUE A REPORT TO THE EDUCATION COMMITTEE OF THE

 SENATE, THE EDUCATION COMMITTEE OF THE HOUSE OF REPRESENTATIVES

 AND THE STATE BOARD OF EDUCATION AND POST THE REPORT ON THE

 PUBLICLY ACCESSIBLE INTERNET WEBSITE OF THE DEPARTMENT OF

 EDUCATION THAT INCLUDES THE FOLLOWING:
- (I) THE NUMBER OF INSTRUCTIONAL I CERTIFICATES ISSUED, IN

 TOTAL AND SUBDIVIDED BY FIELD OF CERTIFICATION AND TEACHER

 PREPARATION PROGRAM FOR EACH YEAR BEGINNING IN 2010. THIS SHALL

- INCLUDE CERTIFICATES ISSUED RECIPROCALLY FOR OUT-OF-STATE TEACHER PREPARATION PROGRAMS.
- (II) THE NUMBER OF INSTRUCTIONAL II CERTIFICATES ISSUED, IN
 TOTAL AND SUBDIVIDED BY FIELD OF CERTIFICATION AND TEACHER
 PREPARATION PROGRAM FOR EACH YEAR BEGINNING IN 2010. THIS SHALL
 INCLUDE CERTIFICATES ISSUED RECIPROCALLY FOR OUT-OF-STATE
 TEACHER PREPARATION PROGRAMS.
- (III) THE NUMBER OF ADMINISTRATIVE CERTIFICATES ISSUED, IN

 TOTAL AND SUBDIVIDED BY FIELD OF CERTIFICATION AND TEACHER

 PREPARATION PROGRAM FOR EACH YEAR BEGINNING IN 2010. THIS SHALL

 INCLUDE CERTIFICATES ISSUED RECIPROCALLY FOR OUT-OF-STATE

 TEACHER PREPARATION PROGRAMS.
- (IV) THE NUMBER OF EMERGENCY CERTIFICATES ISSUED, IN TOTAL

 AND SUBDIVIDED BY THE LOCAL EDUCATION AGENCY BY WHICH THE

 INDIVIDUAL IS EMPLOYED AND BY FIELD OF CERTIFICATION FOR EACH

 YEAR BEGINNING IN 2010.
- (V) THE NUMBER OF INDIVIDUALS WHO HAVE TAKEN THE ASSESSMENT
 UNDER PARAGRAPH (1) AND WHO ATTAINED QUALIFYING SCORES ON THE

 ASSESSMENT SINCE THE ASSESSMENT WAS MADE AVAILABLE BY THE

 DEPARTMENT OF EDUCATION.
- (C) THE JOINT STATE GOVERNMENT COMMISSION SHALL CONDUCT A STUDY AND ISSUE A REPORT SUBJECT TO THE FOLLOWING:
 - (1) THE STUDY SHALL ANALYZE THE FOLLOWING:
- (I) THE APPROPRIATENESS OF THE FIELDS OF CERTIFICATION,

 INCLUDING GRADE SPAN AND AGE LEVEL LIMITATIONS, IN IMPROVING
 STUDENT OUTCOMES.
- (II) THE CREATION OR ELIMINATION OF TEACHING CERTIFICATIONS
 OR ENDORSEMENTS.
 - (III) NATIONAL TRENDS REGARDING GRADE SPAN AND AGE

LIMITATIONS OF CERTIFICATION.

- (2) THE REPORT SHALL BE TRANSMITTED NO LATER THAN JUNE 1, 2019, TO THE FOLLOWING:
 - (I) THE GOVERNOR.
- (II) THE CHAIRPERSON AND MINORITY CHAIRPERSON OF THE EDUCATION COMMITTEE OF THE SENATE.
- (III) THE CHAIRPERSON AND MINORITY CHAIRPERSON OF THE EDUCATION COMMITTEE OF THE HOUSE OF REPRESENTATIVES.

Section 2. This act shall take effect $\frac{in\ 60\ days}{in\ Edge}$ IMMEDIATELY.