



JOY HOFMEISTER

STATE SUPERINTENDENT OF PUBLIC INSTRUCTION
OKLAHOMA STATE DEPARTMENT OF EDUCATION

MEMORANDUM

TO: The Honorable Members of the State Board of Education

FROM: Joy Hofmeister

DATE: August 24, 2017

SUBJECT: Digital Teaching and Learning Standards

Digital Teaching and Learning Standards created by the International Society for Technology in Education (ISTE) are presented to the Oklahoma State Board of Education for its review. These Digital Teaching and Learning standards are aligned to the Oklahoma State Department of Education Strategic Plan and the Oklahoma State Department of Education *Every Student Succeeds Act* Plan and provide the foundation for meeting the requirements established in legislation pursuant to 70 O.S. § 6-186, 6-192:

Section 6-186:

F. By November 1, 2017, the Commission shall adopt rules requiring coursework or training in the use of digital and other instructional technologies as a requisite for program accreditation.

Section 6-192:

A. It is hereby declared to be the intent of the Legislature to establish a professional development procedure whereby all teachers in the state continue their education beyond initial certification by the state to ensure that the children of the state are taught by professional educators, fully prepared in their areas of expertise.

B. The professional development procedure shall include digital teaching and learning standards to enhance content delivery to students and improve student achievement.

ISTE STANDARDS FOR ADMINISTRATORS

1. Visionary Leadership

Administrators inspire and lead development and implementation of a shared vision for comprehensive integration of technology to promote excellence and support transformation throughout the organization.

- Inspire and facilitate among all stakeholders a shared vision of purposeful change that maximizes use of digital age resources to meet and exceed learning goals, support effective instructional practice, and maximize performance of district and school leaders.
- Engage in an ongoing process to develop, implement and communicate technology-infused strategic plans aligned with a shared vision.
- Advocate on local, state and national levels for policies, programs and funding to support implementation of a technology-infused vision and strategic plan.

2. Digital Age Learning Culture

Administrators create, promote and sustain a dynamic, digital age learning culture that provides a rigorous, relevant and engaging education for all students.

- Ensure instructional innovation focused on continuous improvement of digital age learning.
- Model and promote the frequent and effective use of technology for learning.
- Provide learner-centered environments equipped with technology and learning resources to meet the individual, diverse needs of all learners.
- Ensure effective practice in the study of technology and its infusion across the curriculum.
- Promote and participate in local, national and global learning communities that stimulate innovation, creativity and digital age collaboration.

3. Excellence in Professional Practice

Administrators promote an environment of professional learning and innovation that empowers educators to enhance student learning through the infusion of contemporary technologies and digital resources.:

- Allocate time, resources and access to ensure ongoing professional growth in technology fluency and integration.
- Facilitate and participate in learning communities that stimulate, nurture and support administrators, faculty and staff in the study and use of technology.
- Promote and model effective communication and collaboration among stakeholders using digital age tools.
- Stay abreast of educational research and emerging trends regarding effective use of technology and encourage evaluation of new technologies for their potential to improve student learning.





4. Systemic Improvement

Administrators provide digital age leadership and management to continuously improve the organization through the effective use of information and technology resources.

- a. Lead purposeful change to maximize the achievement of learning goals through the appropriate use of technology and media-rich resources.
- b. Collaborate to establish metrics, collect and analyze data, interpret results and share findings to improve staff performance and student learning.
- c. Recruit and retain highly competent personnel who use technology creatively and proficiently to advance academic and operational goals.
- d. Establish and leverage strategic partnerships to support systemic improvement.
- e. Establish and maintain a robust infrastructure for technology including integrated, interoperable technology systems to support management, operations, teaching and learning.

5. Digital Citizenship

Administrators model and facilitate understanding of social, ethical and legal issues and responsibilities related to an evolving digital culture.

- a. Ensure equitable access to appropriate digital tools and resources to meet the needs of all learners.
- b. Promote, model and establish policies for safe, legal and ethical use of digital information and technology.
- c. Promote and model responsible social interactions related to the use of technology and information.
- d. Model and facilitate the development of a shared cultural understanding and involvement in global issues through the use of contemporary communication and collaboration tools.

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ISTE STANDARDS FOR STUDENTS

1. Empowered Learner

Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences. Students:

- articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning outcomes.
- build networks and customize their learning environments in ways that support the learning process.
- use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.
- understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies.

2. Digital Citizen

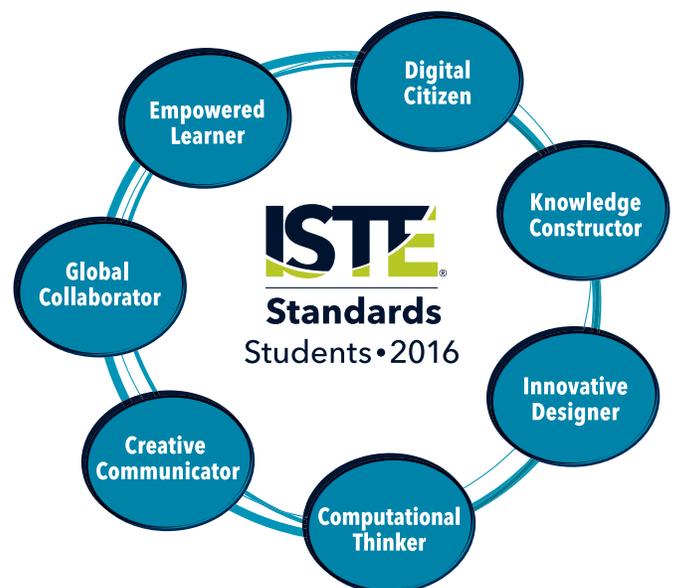
Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical. Students:

- cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.
- engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.
- demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.
- manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.

3. Knowledge Constructor

Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others. Students:

- plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.
- evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.
- curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.
- build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.



4. Innovative Designer

Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions. Students:

- a. know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.
- b. select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.
- c. develop, test and refine prototypes as part of a cyclical design process.
- d. exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems.

5. Computational Thinker

Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions. Students:

- a. formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions.
- b. collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making.
- c. break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.
- d. understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.

6. Creative Communicator

Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals. Students:

- a. choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.
- b. create original works or responsibly repurpose or remix digital resources into new creations.
- c. communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.
- d. publish or present content that customizes the message and medium for their intended audiences.

7. Global Collaborator

Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally. Students:

- a. use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.
- b. use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.
- c. contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.
- d. explore local and global issues and use collaborative technologies to work with others to investigate solutions.

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ISTE STANDARDS FOR EDUCATORS

Empowered Professional

1. Learner

Educators continually improve their practice by learning from and with others and exploring proven and promising practices that leverage technology to improve student learning. Educators:

- Set professional learning goals to explore and apply pedagogical approaches made possible by technology and reflect on their effectiveness.
- Pursue professional interests by creating and actively participating in local and global learning networks.
- Stay current with research that supports improved student learning outcomes, including findings from the learning sciences.

2. Leader

Educators seek out opportunities for leadership to support student empowerment and success and to improve teaching and learning. Educators:

- Shape, advance and accelerate a shared vision for empowered learning with technology by engaging with education stakeholders.
- Advocate for equitable access to educational technology, digital content and learning opportunities to meet the diverse needs of all students.
- Model for colleagues the identification, exploration, evaluation, curation and adoption of new digital resources and tools for learning.

3. Citizen

Educators inspire students to positively contribute to and responsibly participate in the digital world. Educators:

- Create experiences for learners to make positive, socially responsible contributions and exhibit empathetic behavior online that build relationships and community.
- Establish a learning culture that promotes curiosity and critical examination of online resources and fosters digital literacy and media fluency.
- Mentor students in the safe, legal and ethical practices with digital tools and the protection of intellectual rights and property.
- Model and promote management of personal data and digital identity and protect student data privacy.





Learning Catalyst

4. Collaborator

Educators dedicate time to collaborate with both colleagues and students to improve practice, discover and share resources and ideas, and solve problems. Educators:

- a. Dedicate planning time to collaborate with colleagues to create authentic learning experiences that leverage technology.
- b. Collaborate and co-learn with students to discover and use new digital resources and diagnose and troubleshoot technology issues.
- c. Use collaborative tools to expand students' authentic, real-world learning experiences by engaging virtually with experts, teams and students, locally and globally.
- d. Demonstrate cultural competency when communicating with students, parents and colleagues and interact with them as co-collaborators in student learning.

5. Designer

Educators design authentic, learner-driven activities and environments that recognize and accommodate learner variability. Educators:

- a. Use technology to create, adapt and personalize learning experiences that foster independent learning and accommodate learner differences and needs.
- b. Design authentic learning activities that align with content area standards and use digital tools and resources to maximize active, deep learning.
- c. Explore and apply instructional design principles to create innovative digital learning environments that engage and support learning.

6. Facilitator

Educators facilitate learning with technology to support student achievement of the 2016 ISTE Standards for Students. Educators:

- a. Foster a culture where students take ownership of their learning goals and outcomes in both independent and group settings.
- b. Manage the use of technology and student learning strategies in digital platforms, virtual environments, hands-on makerspaces or in the field.
- c. Create learning opportunities that challenge students to use a design process and computational thinking to innovate and solve problems.
- d. Model and nurture creativity and creative expression to communicate ideas, knowledge or connections.

7. Analyst

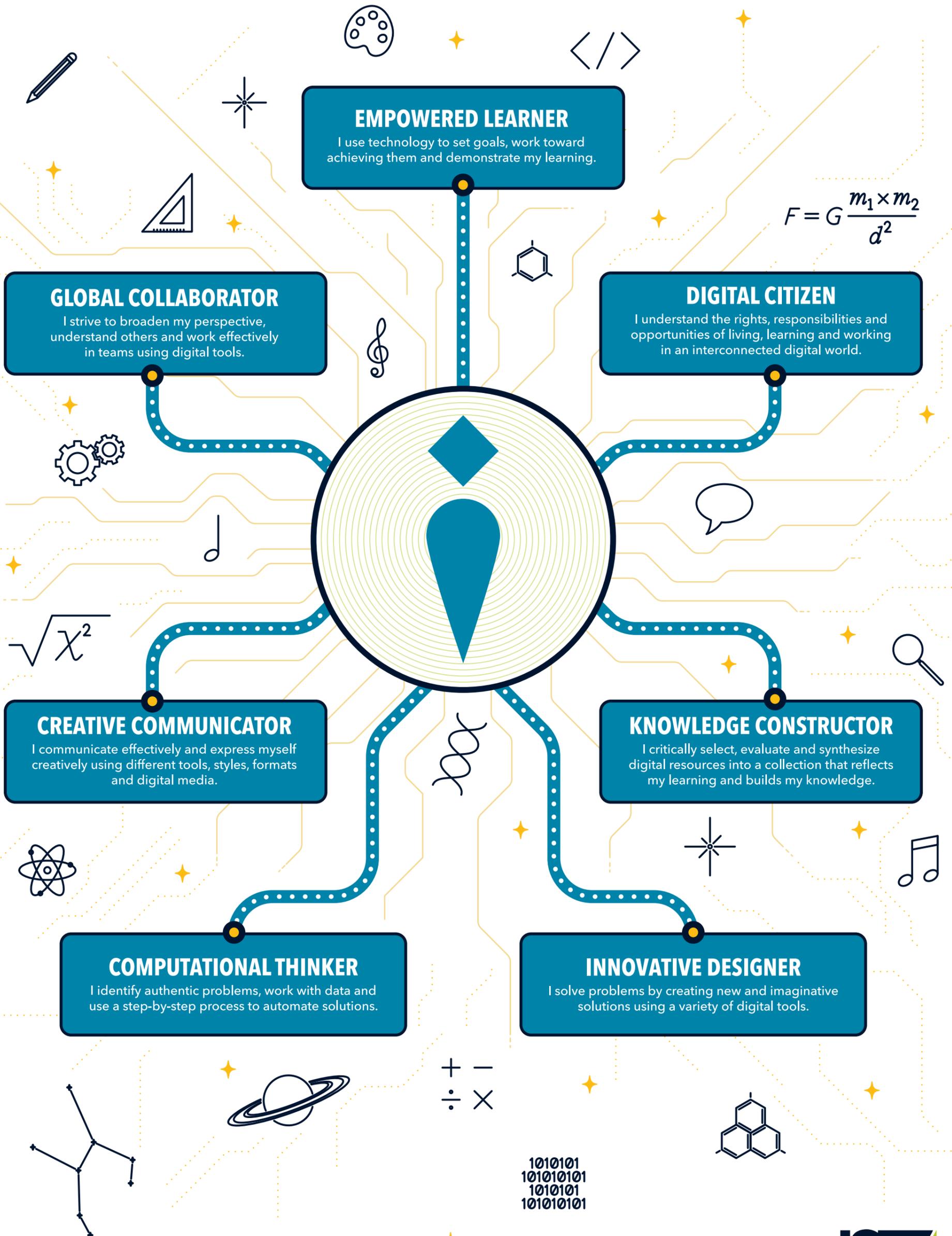
Educators understand and use data to drive their instruction and support students in achieving their learning goals. Educators:

- a. Provide alternative ways for students to demonstrate competency and reflect on their learning using technology.
- b. Use technology to design and implement a variety of formative and summative assessments that accommodate learner needs, provide timely feedback to students and inform instruction.
- c. Use assessment data to guide progress and communicate with students, parents and education stakeholders to build student self-direction.

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I AM A DIGITAL AGE LEARNER

ISTE STANDARDS FOR STUDENTS



An Act

ENROLLED HOUSE
BILL NO. 1576

By: Caldwell of the House

and

Stanislawski of the Senate

An Act relating to schools; amending 70 O.S. 2011, Section 6-186, as amended by Section 12, Chapter 124, O.S.L. 2014 (70 O.S. Supp. 2016, Section 6-186), which relates to criteria for approval and accreditation of teacher education programs; requiring Commission for Educational Quality and Accountability to adopt rules relating to digital technologies for program accreditation by certain date; amending 70 O.S. 2011, Section 6-192, as amended by Section 18, Chapter 124, O.S.L. 2014 (70 O.S. Supp. 2016, Section 6-192), which relates to professional development procedures for teachers; requiring procedures to include digital teaching and learning standards; providing an effective date; and declaring an emergency.

SUBJECT: Teacher education

BE IT ENACTED BY THE PEOPLE OF THE STATE OF OKLAHOMA:

SECTION 1. AMENDATORY 70 O.S. 2011, Section 6-186, as amended by Section 12, Chapter 124, O.S.L. 2014 (70 O.S. Supp. 2016, Section 6-186), is amended to read as follows:

Section 6-186. A. Criteria for the approval and accreditation of teacher education programs in Oklahoma institutions of higher education shall include, but not be limited to, substantial evidence that persons who enter teacher education programs demonstrate:

1. Competency in the oral and written use of the English language;

2. A minimum grade point average as established by the ~~Oklahoma Commission for Teacher Preparation~~ Commission for Educational Quality and Accountability; and

3. The ability to meet criteria established pursuant to the Oklahoma Teacher Preparation Act at the completion of the teacher education program and provide evidence of having worked with children or youth in a variety of situations.

Criteria shall also include a greater emphasis upon field work in accredited schools by prospective teachers under the supervision of higher education faculty.

B. The ~~Oklahoma Commission for Teacher Preparation~~ Commission for Educational Quality and Accountability shall work with the Oklahoma State Regents for Higher Education and the various institutions of higher education in developing guidelines for a paid teacher internship program which may be offered at each institution for prospective teachers. The purpose of each program shall be to provide mentorship and support for prospective teachers. Students enrolled in a teacher education program shall be eligible to participate in the program. Only students who have completed the minimum nonsalaried teacher internship requirement as established by the institution shall be eligible to participate in the paid teacher internship program.

C. It is hereby declared to be the intent of the Legislature that the ~~Oklahoma Commission for Teacher Preparation~~ Commission for Educational Quality and Accountability work with the Oklahoma State Regents for Higher Education and the various institutions of higher education in establishing a procedure whereby full-time teacher education faculty continue their professional development during their tenure at an institution of higher education to ensure that the future teachers of this state are taught by professional educators fully trained in their area of expertise. Each approved or accredited program of teacher education shall have a system for documenting and reporting the annual professional development activities of all teacher education faculty members. Faculty professional development reports shall be reviewed by the Commission along with professional development activities as a normal part of the accreditation process.

It is further declared to be the intent of the Legislature that such professional development plans provide alternative means of education including, but not limited to:

1. Professional development programs;
2. Higher education courses;
3. Exchange programs with public school classroom teachers, administrators, and other school personnel; and
4. Programs whereby all full-time teacher education faculty members directly involved in the teacher education process, including all administrators of the teacher education program, are required to serve in a state accredited public school for at least ten (10) clock hours per school year in responsibilities related to their respective teacher education teaching fields.

All public school systems shall participate in the programs provided for in this subsection when needed.

D. ~~The Oklahoma Commission for Teacher Preparation~~ Commission for Educational Quality and Accountability shall adopt rules requiring specific improvements to strengthen the screening of student applicants and field activity and placement as set out in subsection A of this section. Such rules shall be reviewed and amended or readopted by the Commission at least once every five (5) years.

E. To assist the Commission in setting specific requirements as set out in subsections A and D of this section, the Commission shall annually prepare a statistical report showing the percentage of students from each of the Oklahoma institutions of higher education who have successfully completed or who have failed the competency examination for certification. The annual report shall show the percentages for each institution of higher education and each assessment area separately by student degree status and shall be distributed annually to each member of the ~~Oklahoma Commission for Teacher Preparation~~ Commission for Educational Quality and Accountability, the Oklahoma State Regents for Higher Education, the governing board of each institution which has an approved or state accredited teacher education program, the State Board of Education, the State Board of Career and Technology Education and the Legislature.

F. By November 1, 2017, the Commission shall adopt rules requiring coursework or training in the use of digital and other instructional technologies as a requisite for program accreditation.

SECTION 2. AMENDATORY 70 O.S. 2011, Section 6-192, as amended by Section 18, Chapter 124, O.S.L. 2014 (70 O.S. Supp. 2016, Section 6-192), is amended to read as follows:

Section 6-192. A. It is hereby declared to be the intent of the Legislature to establish a professional development procedure whereby all teachers in the state continue their education beyond initial certification by the state to ensure that the children of the state are taught by professional educators, fully prepared in their areas of expertise. Furthermore, such professional development procedure shall provide alternative means of education, including one or more of the following: In-service programs, higher education courses, or other alternative means of education designed to help teachers enrich their professional abilities.

B. The professional development procedure shall include digital teaching and learning standards to enhance content delivery to students and improve student achievement.

SECTION 3. This act shall become effective July 1, 2017.

SECTION 4. It being immediately necessary for the preservation of the public peace, health or safety, an emergency is hereby declared to exist, by reason whereof this act shall take effect and be in full force from and after its passage and approval.

Passed the House of Representatives the 2nd day of March, 2017.

B. Harold Wright
Presiding Officer of the House
of Representatives

Passed the Senate the 30th day of March, 2017.

Angela Jenkins
Presiding Officer of the Senate

OFFICE OF THE GOVERNOR

Received by the Office of the Governor this 3rd
day of April, 20 17, at 3:01 o'clock P M.
By: Audrey Rockwell

Approved by the Governor of the State of Oklahoma this 6th
day of April, 20 17, at 2:41 o'clock P M.

Mary Fallin
Governor of the State of Oklahoma

OFFICE OF THE SECRETARY OF STATE

Received by the Office of the Secretary of State this 6th
day of April, 20 17, at 3:37 o'clock P M.
By: Paul Spivey