

4.08 Instructional Technology (Grades K-12)

To be endorsed in instructional technology, an applicant shall hold an earned bachelor's or higher degree from an accepted institution of higher education; have completed an approved teacher preparation program including prescribed field experience and student teaching requirements; have completed an approved program in instructional technology; and have demonstrated technology integration competencies including, but not limited to, those specified below:

4.08(1) The instructional technology teacher is knowledgeable about technology operations and concepts and is able to:

4.08(1)(a) demonstrate introductory knowledge, skills and understanding of concepts related to technology including, but not limited to:

4.08(1)(a)(i) the nature and basic operations of technology; and

4.08(1)(a)(ii) proficiency in the use of technology.

4.08(1)(b) demonstrate continual growth in technology knowledge and skills to remain up-to-date on current and emerging technologies.

4.08(2) The instructional technology teacher is knowledgeable about planning and designing learning environments and experiences and is able to:

4.08(2)(a) identify and apply educational technology and information literacy principles associated with the development and implementation of long-and short-term instructional plans.

4.08(2)(b) provide developmentally appropriate learning opportunities that incorporate technology in addressing the diverse needs of all learners.

4.08(2)(c) apply current research on teaching and learning with technology when designing effective learning environments and experiences.

4.08(2)(d) identify and locate technology resources and evaluate them for accuracy and suitability.

4.08(2)(e) plan for the management of technology resources within the context of learning activities.

4.08(2)(f) implement strategies to manage student learning in a technology-enhanced environment.

4.08(3) The instructional technology teacher is knowledgeable about teaching, learning and the curriculum and is able to:

4.08(3)(a) develop and facilitate technology-enhanced experiences that address content standards and student technology standards.

4.08(3)(b) design and use technology to support learner-centered strategies that address the diverse needs of students including:

4.08(3)(b)(i) instructing students on how to collaborate, publish and interact with peers, experts and other audiences;

- 4.08(3)(b)(ii) instructing students on the use of a variety of media and formats to communicate information and ideas effectively to multiple audiences;
 - 4.08(3)(b)(iii) instructing students on the use of technology resources for solving problems and for making informed decisions;
 - 4.08(3)(b)(iv) designing instruction that employs technology in the development of strategies for solving real-world problems; and
 - 4.08(3)(b)(v) applying technology in the development of students' higher order skills and creativity.
- 4.08(3)(c) manage student-learning activities in a technology-enhanced environment.
- 4.08(4) The instructional technology teacher is knowledgeable about assessment and evaluation and is able to:
- 4.08(4)(a) apply technology in assessing student learning using a variety of assessment techniques.
 - 4.08(4)(b) use technology resources to collect/analyze data, interpret results and articulate findings to improve instructional practice and maximize student learning.
 - 4.08(4)(c) apply multiple methods of evaluation to determine students' appropriate use of technology resources for learning, communication and productivity.
- 4.08(5) The instructional technology teacher is knowledgeable about productivity and professional practice and is able to:
- 4.08(5)(a) instruct students on how to utilize technology and technology tools to:
 - 4.08(5)(a)(i) enhance, apply and reinforce learning to increase productivity and to promote creativity;
 - 4.08(5)(a)(ii) construct technology-enhanced models, prepare publications and produce other creative works;
 - 4.08(5)(a)(iii) conduct research and identify the location, evaluation and collection of information from a wide variety of sources;
 - 4.08(5)(a)(iv) process data and report results; and
 - 4.08(5)(a)(v) evaluate and select new information resources and technological innovations based on appropriateness for specific tasks.
 - 4.08(5)(b) use technology resources to engage in ongoing professional development and enhance lifelong learning.
 - 4.08(5)(c) continually evaluate and reflect on professional practice to make informed decisions regarding the use(s) of technology in support of student learning.
 - 4.08(5)(d) apply technology to increase productivity.
 - 4.08(5)(e) use technology to communicate and collaborate with peers, parents and stakeholders in support of student learning.

4.08(6) The instructional technology teacher is knowledgeable about social, ethical, legal and human issues related to technology and is able to:

4.08(6)(a) demonstrate uses of technology systems, resources and applications aligned with laws, rules and policies, including those at the district and school level.

4.08(6)(b) instruct students about the legal and ethical practices related to technology use and the responsible use of technology systems, information and software.

4.08(6)(c) apply technology resources to enable and encourage learners with diverse backgrounds, characteristics and abilities to receive an optimal education.

4.08(6)(d) promote the safe and healthy use of technology resources.

4.08(6)(e) facilitate equitable access to technology resources for all students.

4.08(7) The instructional technology teacher shall self-assess the effectiveness of instruction, based on the achievement of students, and pursue continuous professional development through appropriate activities, coursework and participation in relevant professional organizations.