

TECHNOLOGY STANDARDS AND PERFORMANCE INDICATORS For Teachers

ISTE National Educational Technology Standards and Performance Indicators

I. Technology operations and concepts: *Teachers demonstrate a sound understanding of technology operations and concepts.*

Teachers:

- A. Demonstrate introductory knowledge, skills and understanding of concepts related to technology (as described in the ISTE National Educational Technology Standards for Students)
- B. Demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.

II. Planning and Designing Learning Environments and Experiences: *Teachers plan and design effective learning environments and experiences supported by technology. Teachers:*

- A. Design developmentally appropriate learning opportunities that apply technology-enhanced instructional strategies to support the diverse needs of learners.
- B. Apply current research on teaching and learning with technology when planning learning environments and experiences
- C. Identify and locate technology resources and evaluate them for accuracy and suitability
- D. Plan for the management of technology resources and evaluate them for accuracy and suitability.
- E. Plan strategies to manage student learning in a technology-enhanced environment.

III. Teaching Learning, and the Curriculum: *Teachers implement curriculum plans that include methods and strategies for applying technology to maximize student learning. Teachers:*

- A. Facilitate technology enhanced experiences that address content standards and student technology standards.
- B. Use technology to support learner-centered strategies that address the diverse needs of students
- C. Apply technology to develop student's higher order skills and creativity.
- D. Manage student learning activities in a technology-enhanced environment.

IV. Assessment and Evaluation: *Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies.*

Teachers:

- A. Apply technology in assessing student learning of subject matter using a variety of assessment techniques.
- B. Use technology resources to collect and analyze data, interpret results, and communicate findings to improve instructional practice and maximize student learning.
- C. Apply multiple methods of evaluation to technology to determine students' appropriate use of technology resources for learning communications and productivity.

V. Productivity and Professional Practice: *Teachers use technology to enhance their productivity and professional practice. Teachers:*

- A. Use technology resources to engage in ongoing professional development and lifelong learning.
- B. Continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning.
- C. Apply technology to increase productivity
- D. Use technology to Communicate and collaborate with peers, parents, and the larger community in order to nurture student learning.

VI. Social Ethical, Legal and Human Issues: *Teachers understand the social, ethical, legal and human issues surrounding the use of technology in PK-12 schools and apply that understanding in practice. Teachers:*

- A. Model and teacher legal and ethical practice related to technology use.
- B. Apply technology resources to enable and empower learners with diverse backgrounds, characteristics and abilities.
- C. Identify and use technology resources that affirm diversity.
- D. Promote safe and healthy use of technology resources
- E. Facilitate equitable access to technology resources for all students.

Profile for Technology – Literate Teachers General Preparation Performance Profile

Upon completion of the general preparation component of the program, prospective teachers:

1. Demonstrate a sound understanding of the nature and operation of technology systems. (I)*
2. Demonstrate proficiency in the use of common input and output devices; solve routine hardware and software problems; and make informed choices about technology systems, resources, and services. (I)*
3. Use technology tools and information resources to increase productivity, promote creativity, and facilitate academic learning. (I, III, IV, V)
4. Use content-specific tools (e.g., software, simulation, environmental probes, graphing calculators, exploratory environments, Web tools) to support learning and research. (I, III, V)*
5. Use technology resources to facilitate higher order and complex thinking skills, including problem solving, critical thinking, informed decision making, knowledge construction and creativity. (I, III, V)*
6. Collaborate in constructing technology-enhanced models, preparing publications and producing other creative works using productivity tools. (I, V)*
7. Use technology to locate, evaluate, and collect information from a variety of sources. (I, IV, V)*
8. Use technology tools to process data and report results. (I, III, IV, V) *
9. Use technology in the development of strategies for solving problems in the real world. (I, III, V)*
10. Observe and experience the use of technology in the their major field of study. (III, V)
11. Use technology tools and resources for managing and communicating information (e.g., finances, schedules, addresses, purchases, correspondence). (I, V)
12. Evaluate and select new information resources and technological innovations based on their appropriateness to specific tasks. (I, III, IV, V)*
13. Use a variety of media and formats, including telecommunications to collaborate, publish and interact with peers, experts, and other audiences. (I, V)*
14. Demonstrate an understanding of the legal, ethical cultural and societal issues related to technology. (VI)*

15. Exhibit positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity. (V, VI)*
16. Discuss diversity issues related to electronic media (I, VI)
17. Discuss the health and safety issues related to technology use. (VI)

*Adapted from the ISTE *National Educational Technology Standards for Students*

Profile for Technology – Literate Teachers Professional Preparation Performance Profile

*Prior to the culminating student teaching or internship,
experience, prospective teachers:*

1. Demonstrate a sound understanding of the nature and operation of technology systems. (I)*
2. Demonstrate proficiency in the use of common input and output devices; solve routine hardware and software problems; and make informed choices about technology systems, resources, and services. (I)*
3. Use technology tools and information resources to increase productivity, promote creativity, and facilitate academic learning. (I, III, IV, V)
4. Use content-specific tools (e.g. software, simulation, environmental probes, graphing calculators, exploratory environments, Web tools) to support learning and research. (I, III, V)*
5. Use technology resources to facilitate higher order and complex thinking skills, including problem solving, critical thinking, informed decision making, knowledge construction, and creativity. (I, III, V)*
6. Collaborate in constructing technology-enhanced models, preparing publications, and producing other creative works using productivity tools. (I, V)*
7. Use technology to locate, evaluate, and collect information from a variety of sources. (I, IV, V)
8. Use technology tools to process data and report results. (I, III, IV, V)*
9. Use technology in the development of strategies for solving problems in the real world. (I, III, V)*
10. Observe and experience the use of technology in their major field of study. (III, V)
11. Use technology tools and resources for managing and communicating information (e.g. finances, schedules, addresses, purchases, correspondence). (I, V)

12. Evaluate and select new information resources technological innovations based on their appropriateness to specific tasks. (I, III, IV, V)*
13. Use a variety of media formats, including telecommunications, to collaborate and publish, and interact with peers, experts, and other audiences/ (I, V)*
14. Demonstrate an understanding of the legal, ethical, cultural and societal issues related to technology. (VI)*
15. Exhibit positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits and productivity. (V, VI)*
16. Discuss diversity issues related to electronic media. (I, VI)
17. Discuss the health and safety issues related to technology use. (VI)

*Adapted from the ISTE *National Educational Technology Standards for Students*.

Profile for Technology – Literate Teachers Student Teaching/Internship Performance Profile

Upon completion of the culminating student teaching or internship experience, and at the point of initial licensure, teachers:

1. Apply troubleshooting strategies for solving routine hardware and software problems that occur in the classroom. (I)
2. Identify, evaluate and select specific technology resources available at the school site and district level to support a coherent lesson sequence. (II, III)
3. Design, manage, and facilitate learning experiences using technology that affirm diversity and provide equitable access to resources. (II, VI)
4. Create and implement a well organized plan to manage available technology resources, provide equitable access for all students, and enhance learning outcomes. (II, III)
5. Design and facilitate learning experiences that use assistive technologies to meet the special physical needs of students. (II, III)
6. Design and teach a coherent sequence of learning activities that integrates appropriate use of technology resources to enhance student academic achievement and technology proficiency by connecting district, state, and national curriculum standards with student technology standards (as defined in the ISTE *National Educational Technology Standards for Students*.)
7. Design implement and assess learner-centered lessons that re based on current best practices on teaching and learning with technology and that engage, motivate and encourage self directed student learning. (II, III, IV, V)
8. Guide collaborative learning activities in which students use technology resources to solve authentic problems in the subject area(s). (III)
9. Develop and use criteria for ongoing assessment of technology-based student products and the processes used to create those products.

10. Design an evaluation plan that applies multiple measures and flexible assessment strategies to determine students' technology proficiency and content area learning. (IV)
11. Use multiple measures to analyze instructional practices that employ technology to improve planning, instruction, and management. (II, III, IV)
12. Apply technology productivity tools and resources to collect, analyze, and interpret data and to report results to parents and students. (III, IV)
13. Select and apply suitable productivity tools to complete educational and professional tasks. (II, III, V)
14. Model safe and responsible use of technology and develop classroom procedures to implement school and district technology acceptable use policies and data security plans. (V, VI)
15. Participate in online professional collaboration with peers and experts as part of a personally designed plan, based on self-assessment, for professional growth in technology. (V)