

Version 1:

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Draft: National Infocommunications Technology Competency Standards for Teachers. (NICS TEACHER)

Italics = Covered National Competency Based Teachers Competency Domain

NICS Domain 1: Social, Ethical, Legal, and Human Issues

Social Regard for Learning

- Understand the social, ethical, legal and human issues surrounding the use of technology in schools and practice these principles
- Demonstrate knowledge and skills for using technology in ethical, legal and secure ways
- Facilitate equitable access to technology resources for all students
- Plan, promote and model safe and healthy use of technology resources
- Understand the concepts of ict and its impact upon the local and global society
- Facilitate students' use of technology that addresses their social needs and cultural identity and promotes their interaction with the global community.

Learning Environments

- Promote the responsible use of technology, respect for IP and fair use
- Encourage an atmosphere of respect, honesty, self and collaborative learning, and other positive values within the classroom

Diversity of Learners

- Structure learning activities to ensure equal access to technology resources for all students
- Select technology resources that respect learner diversity

Curriculum

- Develop applications within their disciplines that make effective use of ICTs to support and extend teaching and learning

Productivity and Professional Growth

- Ethical use of technology systems and software
- Ethical use of information content, including plagiarism issues and open source/open access licensing of copyrighted materials
- Aware of, and compliant with, appropriate use policies of ICT resources

NICS Domain 2: Technical Operations and Concepts

Learning Environment

- Apply the basic knowledge, skills, and understanding of concepts related to technology
- Demonstrate a sound understanding of technology operations and concepts

Curriculum, Assessment, Planning, and Reporting

- Use other media that support the curriculum
- Use educational technology media that support the curriculum

Productivity and Professional Growth

- Use various search engines and electronic media for research
- Use the Internet for communication and collaboration with peers and colleagues

NICS Domain 3: Planning, Designing Environment and Experience

Learning Environment

- Selection and use of appropriate media, technologies and integration strategies to accommodate various learning styles
- Develop of instructional materials
- Use technology for class preparation using various online and off line sources (related to writing lesson plans and development of instructional materials). This also includes open source materials, (Moodle over WEBCT, Swish, Linux, etc.)
- Integrate technology with the subject matter areas
- Monitor, evaluate and control student use of technology for educational and recreational purposes, i.e. blocking applications like chikka when students take exam to prevent cheating and or leakage
- Identify the elements of a safe and conducive learning environment, i.e, ergonomic seating, lighting, spacing, ventilation, temperature, hearing distance, etc. Identify conditions by which students may become vulnerable; i.e. use of friendster such that students might fall prey to pedophiles
- Recognize signs that students might need special attention; students who fall below average performance might need one on one tutorial and remediation, gifted students might need to have a special organization or could have advanced lessons
- Establish learning environments that engage all students in focused learning experience and encourage interactions among teachers and students

Diversity of Learners

- Design appropriate learning activities that apply technology to support the needs of learners with diverse backgrounds, characteristics and abilities
- Select technology resources that can be adapted to various learning environments created for diverse learners

Curriculum, Assessment, Planning, and Reporting

- Access resources for instruction planning and/or design available via technology, telecommunications, satellite, cable, and wireless technology
- Awareness of the potential use of ICT in teaching-learning
- Access resources for instruction planning and/or design available telecommunications, satellite, cable, and wireless technology

Community Linkages

- Create or develop learning networks that bring added value to the education profession and society

- Create student learning groups that are meaningfully linked to the situations and aspirations of the community.
- Create teacher learning groups that are meaningfully linked to the situations and aspirations of the community.
- *Assessment, Planning, and Reporting*
- Design developmentally appropriate learning opportunities that apply technology-enhanced instructional strategies to support the diverse needs of learners.
- Plan strategies to manage student learning in a technology-enhanced environment.
- Plan and design effective learning environments and experiences supported by technology.

NICS Domain 4: Teaching, Learning, and Curriculum

Learning Environment

- Selection, evaluation and use of task specific applications for various learning areas
- Develop of instructional materials
- Enrich curriculum lessons with students
- Effective and responsive use of computers, other technologies, and a variety of methods to set learning targets, collect data, assess and evaluation, etc.
- Use media and technology for facilitation of learning, instruction, facilitation and teaching
- Integrate technology with the subject matter areas
- Apply technology to develop student's higher order skills and creativity
- Use a variety of media to accommodate various learning styles, i.e. Audio-visual students over Logical and mathematical
- Recognize signs that students might need special attention; students who fall below average performance might need one on one tutorial and remediation, gifted students might need to have a special organization or could have advanced lessons
- Implement, facilitate and monitor teaching and learning strategies that integrate a range of information and communication technologies to promote and enhance student learning.

Diversity of Learners

- Use technology to support learners with diverse backgrounds, characteristics and abilities
- Identify and use assistive technologies for learners with special needs

Curriculum

- Integrate knowledge in other curricular concerns

Assessment, Planning, and Reporting

- Create authentic learning environment through ICT
- Demonstrate understanding of the opportunities and implications of the uses of ICTs for learning and teaching in the curriculum context

- Plan, implement and manage learning and teaching in open and flexible learning environments Evaluate effectiveness and efficiency of ICT integration in the teaching-learning process

Community Linkages

- Organize learning activities utilizing ICT tools in addressing community issues

NICS Domain 5: Productivity and Professional Practice

Learning Environment

- Develop of instructional materials
- Use of tools and applications to communicate with students, parents, teachers, administrators, and teachers both in the classroom and outside
- Demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies
- Model self-directed attitude towards new content, applications and software, etc. Assumptions: Teachers are also learners. There is an educational paradigm shift from traditional, teacher-centered learning to student-centered learning as exemplified by metacognition as a branch of Education

Community Linkages

- Use computers or other technologies effectively and appropriately to communicate and collaborate with peers, parents, and the larger community in order to enhance student learning

Assessment, Planning, and Reporting

- Use computers and other technologies effectively and appropriately to facilitate evaluation

Productivity and Professional Growth

- Use technology resources to engage in lifelong learning
- Integrate ICT use in education during pre-service and in-service training
- Use ICT to enhance graduate education and continuing professional education
- Develop and share personal repository of resource materials
- Continuously evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning
- Select and evaluate technology based learning materials
- Evaluate, select and use a variety of ICT resources to enhance personal and professional effectiveness
- Determine underlying pedagogical assumptions, gender and ethnic bias, educational relevance, social impact and suitability for the classroom environment, for cooperative learning and peer instruction
- Keep abreast with recent developments in the field of education and subject areas through the use of technology

- Participate actively in innovation and research and be able to communicate results through the use of technology
- Apply technology to increase productivity
- Use of various software tools to increase productivity in professional practice
- Use technology to communicate and collaborate with peers, parents and the larger community in order to nurture student learning
- Contribute/publish information and resource materials online
- Participate in teamwork with peers and mentoring relationships to promote innovation and technology integration
- Demonstrate a critical understanding of the added value of learning networks and collaboration within and between communities and countries
- Create or develop learning networks that bring added value to the education profession and society (locally and globally)

NICS Domain 6: Assessment and Evaluation

Learning Environment

- Effective and responsive use of computers, other technologies, and a variety of methods to set learning targets, collect data, assess and evaluation, etc.
- Monitor, evaluate and control student use of technology for educational and recreational purposes, i.e. blocking applications like chikka when students take exam to prevent cheating and or leakage

Diversity of Learners

- Apply technology to facilitate a variety of appropriate assessment and evaluation strategies recognizing the diversity of learners, and use results to refine design of learning activities

Assessment, Planning, and Reporting

- Use computers and other technologies effectively and appropriately to collect information on student learning using a variety of methods.
- Use computers and other technologies effectively and appropriately to communicate information in a variety of formats on student learning to colleagues, parents, and others
- Develop performance tasks that require students to locate and analyze information and to use a variety of media to communicate results clearly.

NICS Domain 7: Educational Technology Skills

Community Linkages

- Utilize ICT tools (computer, radio, TV, hand-held electronic devices) to communicate and accomplish educational goals