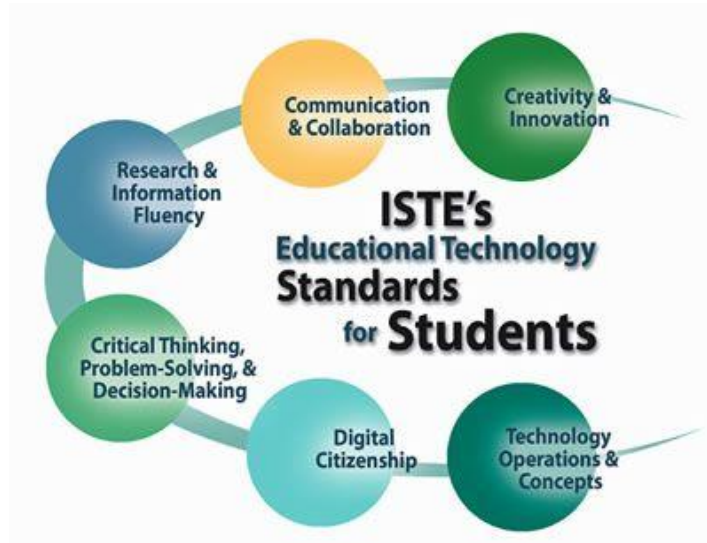
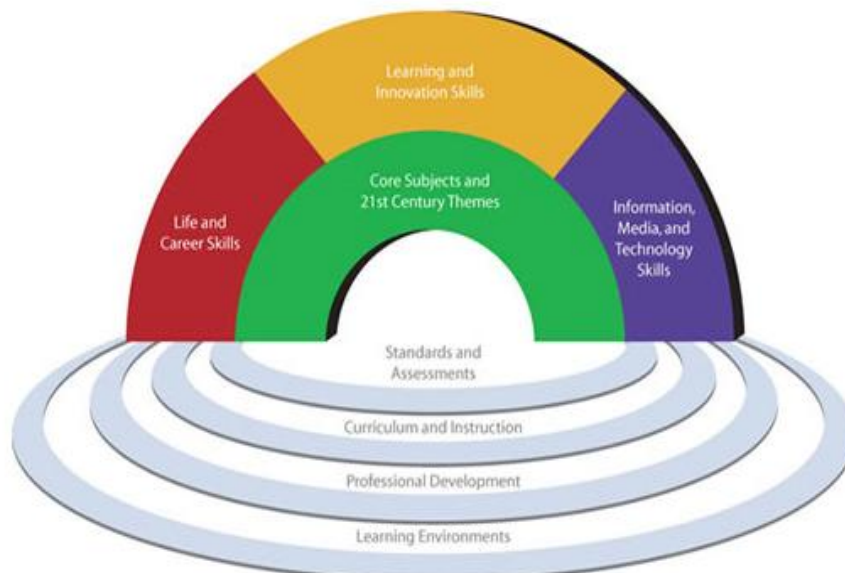


# NETS-S and P21 Framework Correlation



NETS-S:

[http://www.iste.org/Content/NavigationMenu/NETS/ForStudents/2007Standards/NETS\\_for\\_Students\\_2007\\_Standards.pdf](http://www.iste.org/Content/NavigationMenu/NETS/ForStudents/2007Standards/NETS_for_Students_2007_Standards.pdf)



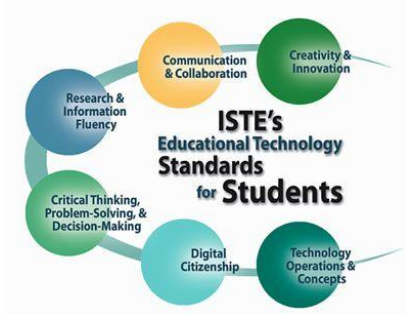
P21 Framework: [http://www.p21.org/documents/P21\\_Framework\\_Definitions.pdf](http://www.p21.org/documents/P21_Framework_Definitions.pdf)



# Creativity and Innovation

## NETS-S: Creativity and Innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.



Students:

- apply existing knowledge to generate new ideas, products, or processes.
- create original works as a means of personal or group expression.
- use models and simulations to explore complex systems and issues.
- identify trends and forecast possibilities.

## P21: Creativity and Innovation

*Think Creatively*

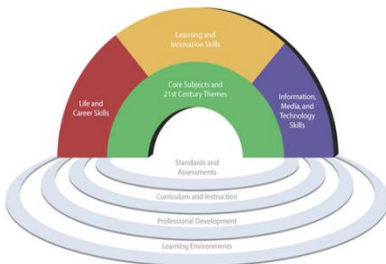
- Use a wide range of idea creation techniques (such as brainstorming)
- Create new and worthwhile ideas (both incremental and radical concepts)
- Elaborate, refine, analyze and evaluate their own ideas in order to improve and maximize creative efforts

*Work Creatively with Others*

- Develop, implement and communicate new ideas to others effectively
- Be open and responsive to new and diverse perspectives; incorporate group input and feedback into the work
- Demonstrate originality and inventiveness in work and understand the real world limits to adopting new ideas
- View failure as an opportunity to learn; understand that creativity and innovation is a long-term, cyclical process of small successes and frequent mistakes

*Implement Innovations*

- Act on creative ideas to make a tangible and useful contribution to the field in which the innovation will occur



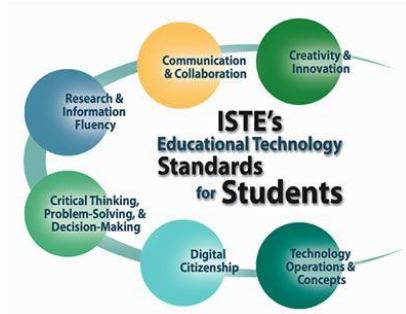
# Communication and Collaboration

### NETS-S: Communication and Collaboration

Students will use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

Students:

- interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
- communicate information and ideas effectively to multiple audiences using a variety of media and formats.
- develop cultural understanding and global awareness by engaging with learners of other cultures.
- contribute to project teams to produce original works or solve problems.



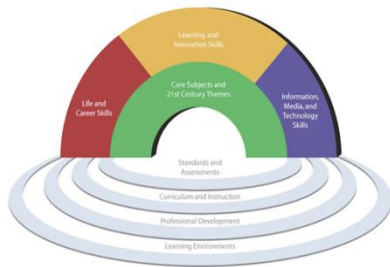
### P21: Communication and Collaboration

#### *Communicate Clearly*

- Articulate thoughts and ideas effectively using oral, written and nonverbal communication skills in a variety of forms and contexts
- Listen effectively to decipher meaning, including knowledge, values, attitudes and intentions
- Use communication for a range of purposes (e.g. to inform, instruct, motivate and persuade)
- Utilize multiple media and technologies, and know how to judge their effectiveness a priori as well as assess their impact
- Communicate effectively in diverse environments (including multi-lingual)

#### *Collaborate with Others*

- Demonstrate ability to work effectively and respectfully with diverse teams
- Exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal
- Assume shared responsibility for collaborative work, and value the individual contributions made by each team member



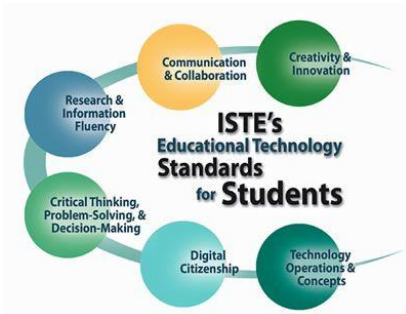
# Research and Information Fluency/Literacy

## NETS-S: Research and Information Fluency

Students apply digital tools to gather, evaluate, and use information.

Students:

- plan strategies to guide inquiry
- locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
- evaluate and select information sources and digital tools based on the appropriateness to specific tasks
- process data and report results



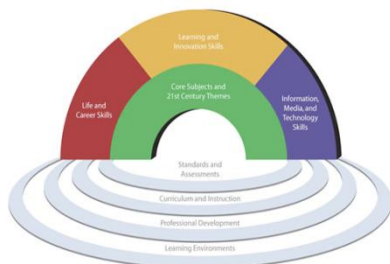
## P21: Information Literacy

### *Access and Evaluate Information*

- Access information efficiently (time) and effectively (sources)
- Evaluate information critically and competently

### *Use and Manage Information*

- Use information accurately and creatively for the issue or problem at hand
- Manage the flow of information from a wide variety of sources
- Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of information



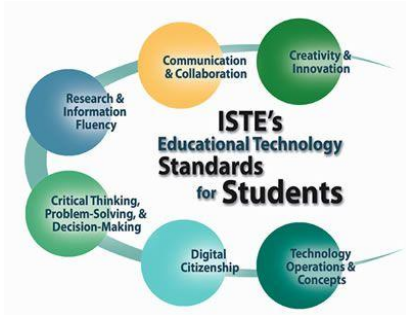
# Critical Thinking, Problem Solving, and Decision Making

### NETS-S; Critical Thinking, Problem Solving, and Decision Making

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

Students:

- identify and define authentic problems and significant questions for investigation.
- plan and manage activities to develop a solution or complete a project.
- collect and analyze data to identify solutions and/or make informed decisions.
- use multiple processes and diverse perspectives to explore alternative solutions



### P21: Critical Thinking and Problem Solving

#### *Reason Effectively*

- Use various types of reasoning (inductive, deductive, etc.) as appropriate to the situation

#### *Use Systems Thinking*

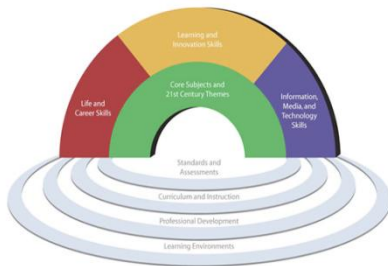
- Analyze how parts of a whole interact with each other to produce overall outcomes in complex systems

#### *Make Judgments and Decisions*

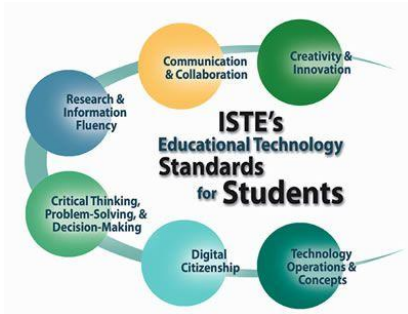
- Effectively analyze and evaluate evidence, arguments, claims and beliefs
- Analyze and evaluate major alternative points of view
- Synthesize and make connections between information and arguments
- Interpret information and draw conclusions based on the best analysis
- Reflect critically on learning experiences and processes

#### *Solve Problems*

- Solve different kinds of non-familiar problems in both conventional and innovative ways
- Identify and ask significant questions that clarify various points of view and lead to better solutions



# Digital Citizenship/Media Literacy



## NETS-S: Digital Citizenship

Students will understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

Students:

- advocate and practice safe, legal, and responsible use of information and technology
- exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity
- demonstrate personal responsibility for lifelong learning
- exhibit leadership for digital citizenship

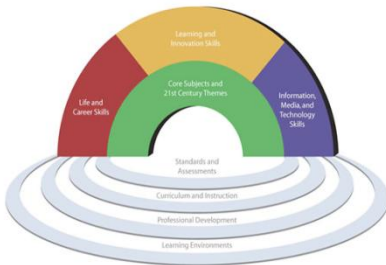
## P21: Media Literacy

*Analyze Media*

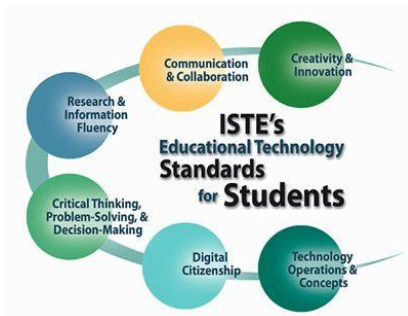
- Understand both how and why media messages are constructed, and for what purposes
- Examine how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors
- Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media

*Create Media Products*

- Understand and effectively utilize the most appropriate expressions and interpretations in diverse, multi-cultural environments



## Technology Operations and Concepts/ICT Literacy



### NETS-S: Technology Operations and Concepts

Students demonstrate a sound understanding of technology concepts, systems, and operations.

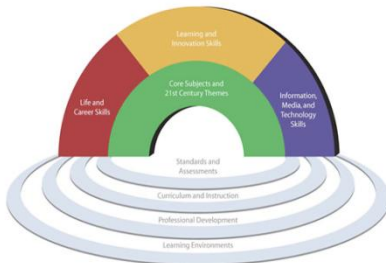
Students:

- understand and use technology systems
- select and use applications effectively and productively
- troubleshoot systems and applications
- transfer current knowledge to learning of new technologies

### P21: ICT Literacy

*Apply Technology Effectively*

- Use technology as a tool to research, organize, evaluate and communicate information
- Use digital technologies (computers, PDAs, media players, GPS, etc.), communication/networking tools and social networks appropriately to access, manage, integrate, evaluate and create information to successfully function in a knowledge economy



### P21: Media Literacy

*Create Media Products*

- Understand and utilize the most appropriate media creation tools, characteristics and conventions



## P21: Life and Career Skills

### FLEXIBILITY AND ADAPTABILITY

#### *Adapt to Change*

- Adapt to varied roles, jobs responsibilities, schedules and context
- Work effectively in a climate of ambiguity and changing priorities

#### *Be Flexible*

- Incorporate feedback effectively
- Deal positively with praise, setbacks and criticism
- Understand, negotiate and balance diverse views and beliefs to reach workable solutions, particularly in multi-cultural environments

### INITIATIVE AND SELF-DIRECTION

#### *Manage Goals and Time*

- Set goals with tangible and intangible success criteria
- Balance tactical (short-term) and strategic (long-term) goals
- Utilize time and manage workload efficiently

#### *Work Independently*

- Monitor, define, prioritize and complete tasks without direct oversight

#### *Be Self-directed Learners*

- Go beyond basic mastery of skills and/or curriculum to explore and expand one's own learning and opportunities to gain expertise
- Demonstrate initiative to advance skill levels towards a professional level
- Demonstrate commitment to learning as a lifelong process
- Reflect critically on past experiences in order to inform future progress

### SOCIAL AND CROSS-CULTURAL SKILLS

#### *Interact Effectively with Others*

- Know when it is appropriate to listen and when to speak
- Conduct themselves in a respectable, professional manner

#### *Work Effectively in Diverse Teams*

- Respect cultural differences and work effectively with people from a range of social and cultural backgrounds
- Respond open-mindedly to different ideas and values
- Leverage social and cultural differences to create new ideas and increase both innovation and quality of work

### PRODUCTIVITY AND ACCOUNTABILITY

#### *Manage Projects*

- Set and meet goals, even in the face of obstacles and competing pressure
- Prioritize, plan and manage work to achieve the intended result

#### *Produce Results*

- Demonstrate additional attributes associated with producing high quality products including the abilities to:
  - Work positively and ethically
  - Manage time and projects effectively
  - Multi-task
  - Participate actively, as well as be reliable and punctual
  - Present oneself professionally and with proper etiquette
  - Collaborate and cooperate effectively with teams
  - Respect and appreciate team diversity
  - Be accountable for results

### LEADERSHIP AND RESPONSIBILITY

#### *Guide and Lead Others*

- Use interpersonal and problem-solving skills to influence and guide others toward a goal
- Leverage strengths of others to accomplish a common goal
- Inspire others to reach their very best via example and selflessness
- Demonstrate integrity and ethical behavior in using influence and power

#### *Be Responsible to Others*

- Act responsibly with the interests of the larger community in mind

