

	Beginning	Developing	Accomplished	Exemplary
Software and Hardware	Requires frequent teacher direction in choice and use of appropriate hardware and software.	Chooses and uses an appropriate tool or resource, sometimes requiring teacher assistance.	Chooses and uses an appropriate tool or resource without teacher assistance.	Independently explores appropriate technology tools or resources, then shares experience with others.
Information Gathering	Able to conduct a limited search. Rarely considers the validity of information presented.	Able to conduct a search using basic sources. Sometimes able to evaluate the validity of information presented.	Able to conduct an advanced search using a variety of sources. Consistently evaluates validity of information presented.	Able to conduct an advanced search using a wide variety of sources. Skillfully evaluates validity of information presented.
Communication	Uses very limited communication tools to communicate with peers.	Uses basic communication tools to communicate with peers. Sometimes communicates with experts and other audiences.	Effectively uses a variety of communication tools to exchange information with peers, experts, and other audiences.	Effectively uses a wide variety of communication tools to exchange information with peers, experts, and other audiences.
File Management	Has limited ability to maneuver through file system. Requires frequent assistance.	Has basic ability to maneuver throughout file system. Has basic understanding of file management .	Fully understands file system. Able to maneuver throughout file system.	Demonstrates sophistication and consistency in naming files. Manages complex file system efficiently.
Presentation	Uses limited technology, with frequent assistance, to develop and present information. Needs frequent assistance to communicate ideas to audience.	Uses basic technologies to develop and present information. Communicates ideas to intended audience.	Uses a variety of media and formats to develop and present information. Communicates effectively to intended audiences.	Uses a wide variety of media and formats to develop and present information. Shows creativity in communicating to multiple audiences.
Responsible Use	Follows Responsible Use Policy , but makes poor ethical decisions. Is unaware of his/her digital footprint .	Follows Responsible Use Policy and considers most ethical implications in the use of technology. Shows awareness of his/her digital footprint .	Follows Responsible Use Policy and makes good ethical decisions in the use of technology. Actively considers digital footprint .	Follows Responsible Use Policy and makes sophisticated ethical decisions in the use of technology. Demonstrates proper online reputation management .

Notes:

Definition

The ability to use information and technology effectively empowers deeper learning in 21st century schools. To be effective, individuals must be able to exhibit a range of functional and critical thinking skills related to information and technology.*

**For more details, see <http://www.p21.org/about-us/p21-framework/61>.*

Framing Language

Effective use of information and technology are critical 21st century skills that are required across all domains of learning. This rubric distills the common elements in the effective use of information, media and technology and is designed to function across all disciplines. It measures the understanding that students have of different technologies and the levels of ability they demonstrate in the use technology for a variety of purposes.

Glossary

The definitions that follow were developed to clarify terms and concepts used in this rubric only.

- **Advanced Search:** refers to the sophisticated use of a search engine and may include, among others: selection of specific date ranges, choice of material types [e.g. only books, not magazine articles], language preferences [e.g. only articles in Spanish], as well as the use of Boolean operators in searches [e.g. AND, OR, NOT, etc.]
- **Digital Footprint:** the information generated, and typically left behind, by all enduser interactions with the Internet; the term encompasses everything from userID and password information to content that is stored on social media [Facebook, etc.] and mobile media [Twitter, etc.].
- **File System:** the main organizational tool that governs the way that files are stored on a computer, tablet, or smartphone
- **Online Reputation Management (ORM):** the analysis, or influencing, of an individual's online presence; see **digital footprint**
- **Responsible Use Policy:** a document that sets out the rules for the use of technology [hardware, software, and Internet services] of school and district technology resources; the RUP also addresses ethical use issues, including copyright violations and plagiarism.
- **Software and Hardware:** The choice and usage of a technological resource – a hardware platform or a piece of software, a sensor, document camera, microscope, digital recorder, camera, etc.