21st Century Skills
Self-Assessment

- Engage in Problem Solving
- Collaborate with Others
- Think Critically and Creatively
- Communicate Clearly and Accurately
- Make Real-World Applications
- Reflect on Learning
- Analyze, Reason, and Evaluate
- Open-Minded

Image adapted from https://sites.psu.edu/dennisreynolds/2016/04/01/final-blog-seamless-learning-and-21st-century-skills/
LEARNING AND INNOVATION SKILLS

Learning and innovation skills increasingly are being recognized as those that separate students who are prepared for a more and more complex life and work environment in the 21st century, and those who are not. A focus on creativity, critical thinking, communication, and collaboration is essential to prepare students for the future.

COMMUNICATION AND COLLABORATION

Communicate Clearly
- Articulate thoughts and ideas effectively using communication skills in a variety of forms and contexts
- Listen effectively to decipher meaning, including knowledge, value, attitudes and intentions
- Use communication for a range of purposes (e.g., to inform, instruct, motivate and persuade)
- Communicate effectively in all kinds environments

Collaborate with Others
- Demonstrate ability to work effectively and respectfully with partners and small groups
- Assume shared responsibility for collaborative work without dominating or letting others do all the work
- Be sensitive of the needs of your peers and do what you can to help them
- Use social skills in order to avoid conflict and maintain happiness

Think Interdependently
- Exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal
- Realize that a group can accomplish more than an individual
- Listen to and strongly consider the ideas of others
- Leverage strengths of others to accomplish a common goal
- Value the individual contributions made by each team member
CRITICAL THINKING AND PROBLEM SOLVING

Think Critically
• Use various types of reasoning (inductive, deductive, etc.) as appropriate to the situation
• 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 and alternative points of view
• Interpret information and draw conclusions based on the best analysis

Ask Questions
• Ask questions to fill in the gaps between what is known and what is unknown
• Ask questions at all levels of Bloom’s Taxonomy of Thinking, but match the purpose with the correct type of question
• Identify and ask significant questions that clarify various points of view and lead to better solutions

Solve Problems
• Solve different kinds of non-familiar problems in both conventional and innovative ways
• When appropriate, challenge yourself to find multiple correct ways to solve a problem
REFLECTION AND AWARENESS

Metacognition (Thinking About Our Thinking)
- Know what you know and know what you don’t know
- Know what to do and when to do it
- Be conscious of the steps and strategies during the act of problem solving
- Develop a plan of action, remember that plan over a period of time, then reflect back and evaluate the plan upon its completion
- Be aware of one's actions and the effect of those actions on others and on the environment
- Shift gears if a plan isn’t working
- Explain your thinking and the strategies used while making decisions

Reflect and Synthesize
- Reflect critically on experiences in order to avoid repeating mistakes and to inform future progress
- Synthesize and make connections between information and arguments
- Identify those “Aha Moments” when something finally clicks
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

Be a Risk-Taker
• Take educated risks and frequently push the boundaries of your perceived limits
• Be resilient if your risk-taking isn’t successful - Don’t worry what others think
• Know when risks are not worth taking
• View failure as an opportunity to learn; understand that creativity and innovation is a long-term, cyclical process of small successes and frequent mistakes

Be Self-Directed Learners
• Go beyond what is required (the minimum) 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
• Work on tasks because of the challenges they present rather than the material rewards – Be intrinsically motivated

Persist Despite Setbacks
• Stick to the task until it is completed
• Stay focused on your task without distraction
• Have a repertoire of strategies to solve problems if one isn’t working
INFORMATION, MEDIA AND TECHNOLOGY SKILLS

People in the 21st century live in a technology and media-suffused environment, marked by various characteristics, including: 1) access to an abundance of information, 2) rapid changes in technology tools, and 3) the ability to collaborate and make individual contributions on an unprecedented scale. To be effective in the 21st century, citizens and workers must be able to exhibit a range of functional and critical thinking skills related to information, media and technology.

INFORMATION LITERACY

Access and Evaluate Information
- Access information efficiently (time) and effectively (sources)
- Evaluate information critically and competently (use only trusted resources)

Beginning  Developing  Secure

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 (cite your sources)

Beginning  Developing  Secure
MEDIA LITERACY

Analyze Media
- Understand both how and why media messages are constructed, and for what purposes
- Utilize multiple media and technologies, and know how to judge their effectiveness as well as assess their impact
- Examine how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors

Create Media Products
- Understand and utilize the most appropriate media creation tools, characteristics and conventions
- Understand and effectively utilize the most appropriate expressions and interpretations in diverse, multi-cultural environments
- ICT (Information, Communications and Technology) LITERACY

Apply Technology Effectively
- Use technology as a tool to research, organize, evaluate and communicate information
- Use technology as a tool to create and share what you know with others
- Use digital technologies (computers, handhelds, 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