

21st Century Learning Skills Notes

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Why is Learning different in this century?

Because ‘know what’ and ‘know how’ kinds of knowledge have only a short shelf life, it is no longer viable to ask schools to ‘fill up’ students with all the knowledge they need beyond school. Nor is it viable to teach students any particular ‘one best way’ of knowing – or doing – things. Instead they need to teach students how to work out *for themselves* what to do.

Thus, where modern thought emphasizes direction, order, coherence, stability, simplicity, control, autonomy, and universality, post modern thought emphasizes fragmentation, diversity, discontinuity, contingency, pragmatism, multiplicity, and connections.

What are the 21st Century skills?

Ways of thinking. Creativity, critical thinking, problem-solving, decision-making and learning

Ways of working. Communication and collaboration

Tools for working. Information and communications technology (ICT) and information literacy

Skills for living in the world. Citizenship, life and career, and personal and social responsibility

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

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

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

Literacy

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

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 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

ITC 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

Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of information technologies

Life 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

So, what does learning look like?

Project-based learning

Problem-based learning

Students as collaborators

Sage on the stage vs. guide on the side

Learning outside of the classroom walls

More blurred lines between school learning and other learning

What we've learned from gaming

What does parenting look like?

Parents need to be tech savvy but comfortable with their kids knowing more than they do

Parents need to be "21st century skills" savvy and look for opportunities to help students grow in these areas

Growth mindset – recognizing where you're perpetuating a fixed mindset

Flexibility and adaptability

Letting kids work out their own problems

Walking away from opportunities – kids will always have more opportunities than they can be a part of

Being well-informed but not obsessed

Talking to children matter-of-factly so as to model for them good coping skills and problem solving