















Partnership for 21st Century Learning Alignment

Legend













	Standard addressed in SeaPerch Build Guide
	Standard could be addressed by additional activities during the SeaPerch build
	Standard could be met at a SeaPerch competition

Note: Only standards groups where at least one standard is met are included in the mapping below.

Core Subjects

Cluster	Indicator Statement	Addressed
Global Awareness	Use 21st century skills to understand and address global issues.	  
Environmental Literacy	Demonstrate knowledge and understanding of the environment and the circumstances and conditions affecting it, particularly as relates to air, climate, land, food, energy, water and ecosystems.	 
	Demonstrate knowledge and understanding of society's impact on the natural world (e.g., population growth, population development, resource consumption rate, etc.).	 
	Investigate and analyze environmental issues and make accurate conclusions about effective solutions.	 
	Take individual and collective action towards addressing environmental challenges (e.g., participate in global actions, designing solutions that inspire action on environmental issues).	 

Creativity & Innovation

Cluster	Indicator Statement	Addressed
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.	  
	Develop, implement, and communicate new ideas to others effectively.	  

Work Creatively with Others	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.	● ○ △

Critical Thinking & Problem Solving

Cluster	Indicator Statement	Addressed
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.	● ○ △

Communication & Collaboration

Cluster	Indicator Statement	Addressed
Communicate Clearly	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).	● ○ △
	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.	● ○ △

Information Literacy

Cluster	Indicator Statement	Addressed
Access & Evaluate Information	Access information efficiently (time) and effectively (sources).	● ○ △
	Evaluate information critically and competently.	● ○ △
Use & Manage Information	Use information accurately and creatively for the issue or problem at hand.	● ○ △
	Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of information.	● ○ △

Flexibility & Adaptability

Cluster	Indicator Statement	Addressed
Adapt to Change	Adapt to varied roles, job responsibilities, schedules, and contexts.	● ○ △
	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.	● ○ △
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Initiative & Self-Direction

Cluster	Indicator Statement	Addressed
Manage Goals & 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 & Cross-Cultural Skills

Cluster	Indicator Statement	Addressed
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 & Accountability

Cluster	Indicator Statement	Addressed
Manage Projects	Set and meet goals, even in the face of obstacles and competing pressures.	● ○ △
	Prioritize, plan, and manage work to achieve the intended result.	● ○ △
21st Century Standards	Engage students with the real-world data, tools, and experts they will encounter in college, on the job, and in life; students learn best when actively engaged in solving meaningful problems.	● ○ △
	Allow for multiple measures of mastery.	● ○ △
Assessment of 21st Century Skills	Emphasize useful feedback on student performance that is embedded into everyday learning.	● ○ △
21st Century Curriculum & Instruction	Teach 21st century skills discretely in the context of key subjects and 21st century interdisciplinary themes.	●
	Focus on providing opportunities for applying 21st century skills across content areas and for a competency-based approach to learning.	●
	Enable innovative learning methods that integrate the use of supportive technologies, inquiry- and problem-based approaches and higher order thinking skills.	●
	Encourage the integration of community resources beyond school walls.	●
21st Century Professional Development	Highlight ways teachers can seize opportunities for integrating 21st century skills, tools, and teaching strategies into their classroom practice — and help them identify what activities they can replace/de-emphasize.	●
	Balance direct instruction with project-oriented teaching methods.	○
	Illustrate how a deeper understanding of subject matter can actually enhance problem-solving, critical thinking, and other 21st century skills.	●
	Enable 21st century professional learning communities for teachers that model the kinds of classroom learning that best promotes 21st century skills for students.	○
	Cultivate teachers' ability to identify students' particular learning styles, intelligences, strengths, and weaknesses.	○

Cluster	Indicator Statement	Addressed
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; and, be accountable for results.	● ○

Leadership & Responsibility

Cluster	Indicator Statement	Addressed
Guide & 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.	● ○ △
	Help teachers develop their abilities to use various strategies (such as formative assessments) to reach diverse students and create environments that support differentiated teaching and learning.	● ○ △
	Support the continuous evaluation of students' 21st century skills development.	● ○ △
	Encourage knowledge sharing among communities of practitioners, using face-to-face, virtual, and blended communications.	● ○ △
	Use a scalable and sustainable model of professional development.	● ○ △
21st Century Learning Environments	Create learning practices, human support, and physical environments that will support the teaching and learning of 21st century skill outcomes.	● ○ △
	Support professional learning communities that enable educators to collaborate, share best practices, and integrate 21st century skills into classroom practice.	● ○ △
	Enable students to learn in relevant, real-world 21st century contexts (e.g., through project-based or other applied work).	● ○ △
	Allow equitable access to quality learning tools, technologies, and resources.	● ○ △

Cluster	Indicator Statement	Addressed
	Provide 21st century architectural and interior designs for group, team, and individual learning.	● ○ △
	Support expanded community and international involvement in learning, both face-to-face and online.	● ○ △