

21st Century Skills: GameMaker Programming I & II

			Module 1	Modules 2 --- 4	Modules 5 --- 6	Modules 7--- 21			
1	1 Creativity and Innovation	1.A.1 Use a wide range of idea creation techniques (such as brainstorming)	x	x		x			
		1.A.2 Create new and worthwhile ideas (both incremental and radical concepts)	x	x	x	x			
		1.A.3 Elaborate, refine, analyze, and evaluate their own ideas in order to improve and maximize creative efforts	x	x	x	x			
		1.A Think Creatively		x		x			
		1.B.1 Develop, implement, and communicate new ideas to others effectively.		x		x			
		1.B.2 Be open and responsive to new and diverse perspectives		x	x	x			
		1.B.3 Incorporate group input and feedback into the work	x	x	x	x			
		1.B.4 Demonstrate originality and inventiveness in work and understand the real world limits to adopting new ideas		x		x			
		1.B.5 Understand that creativity and innovation are long-term, cyclical processes of small success and frequent challenges	x	x	x	x			
		1.B Work Creatively with Others							
1.C Implement Innovations	1.C.1 Act on creative ideas to make a tangible and useful contribution to the field in which the innovation will occur	x	x	x	x				
	2.A Reason Effectively	2.A.1 Use various types of reasoning (inductive, deductive, etc.) as appropriate to the situation.	x	x	x	x			
2	2 Critical Thinking and Problem Solving	2.B Use Systems Thinking	2.B.1 Analyze how parts of a whole interact with each other to produce overall outcomes in complex systems	x	x	x	x		
		2.C.1 Effectively analyze and evaluate evidence, arguments, claims, and beliefs	x	x	x	x			
		2.C.2 Analyze and evaluate major alternative points of view	x	x	x	x			
		2.C.3 Synthesize and make connections between information and arguments	x	x	x	x			
		2.C.4 Interpret information and draw conclusions based on the best analysis	x	x	x	x			
		2.C.5 Reflect critically on learning experiences and processes	x	x	x	x			
		2.D.1 Solve different kinds of non-familiar problems in both conventional and innovative ways		x	x	x			
		2.C Make Judgments and Decisions	2.D.2 Identify and ask significant questions that clarify various points of view and lead to better solutions	x	x	x	x		
		3	3 Collaboration	3.A Communicate Clearly	3.A.1 Articulate thoughts and ideas effectively using oral, written, and nonverbal communication skills in a variety of forms and contexts	x	x		x
					3.A.2 Listen effectively to decipher meaning, including knowledge, values, attitudes, and intentions			x	
3.A.3 Use communication for a range of purposes (e.g. to inform, instruct, motivate, and persuade)	x				x	x	x		
3.A.4 Utilize multiple media and technologies, understanding their impact	x				x	x	x		
3	3 Communication and Coll	3.B Collaborate with Others	3.A.5 Communicate effectively in diverse environments (including multi-lingual)	x	x	x	x		
			3.B.1 Demonstrate ability to work effectively and respectfully with diverse teams	x	x	x	x		
			3.B.2 Exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal	x	x	x	x		
			3.B.3 Assume shared responsibility for collaborative work, and value the individual contributions made by each team member		x	x	x		

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4 Information Literacy	4. A Access and Evaluate Information	4.A.1 Access information efficiently (time) and effectively (sources)	x	x	x	x
		4.A.2 Evaluate information critically and competently	x	x	x	x
	4. B Use and Manage Information	4.B.1 Use information accurately and creatively for the issue or problem at hand	x	x	x	x
		4.B.2 Manage the flow of information from a wide variety of sources				x
		4.B.3 Apply a fundamental understanding of the ethical/legal issue surrounding the access and use of information				x
		5.A.1 Understand both how and why media messages are constructed, and for what purposes				
5 Media Literacy	5. A Analyze Media	5.A.2 Examine how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors			x	
		5.A.3 Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media				
	5. B Create Media Products	5.B.1 Understand and utilize the most appropriate media creation tools, characteristics, and conventions	x	x	x	x
		5.B.2 Understand and effectively utilize the most appropriate expressions and interpretations in diverse, multi-cultural environments				
6 ITC Literacy (Information, Communications, and Technology)	6. A Apply Technology Effectively	6.A.1 Use technology as a tool to research, organize, evaluate, and communicate information	x	x	x	x
		6.A.2 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		x	x	x
		6.A.3 Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of information technologies				x
Flexibility and Adaptability	7. A Adapt to Change	7.A.1 Adapt to varied roles, jobs responsibilities, schedules, and contexts	x	x	x	x
		7.A.2 Work effectively in a climate of ambiguity and changing priorities				x
	7. B Be Flexible	7.B.1 Incorporate feedback effectively	x	x	x	x
		7.B.2 Deal positively with praise, setbacks, and criticism	x	x	x	x
7 F		7.B.3 Understand, negotiate, and balance diverse views and beliefs to reach workable solutions, particularly in multi-cultural environments				x
8 Initiative and Self-Directed	8. A Manage Goals and Time	8.A.1 Set goals with tangible and intangible success criteria	x	x	x	x
		8.A.2 Balance tactical (short-term) and strategic (long-term) goals			x	
		8.A.3 Utilize time and manage workload efficiently	x	x	x	x
	8. B Work Independently	8.B.1 Monitor, define, prioritize, and complete tasks without direct oversight	x	x	x	x
		8.C.1 Go beyond basic mastery of skills and/or curriculum to explore and expand one's own learning and opportunities to gain expertise			x	x
	8. C Be Self-directed Learners	8.C.2 Demonstrate initiative to advance skill levels towards a professional level		x	x	x
		8.C.3 Demonstrate commitment to learning as a lifelong process				x
		8.C.4 Reflect critically on past experiences in order to inform future progress		x	x	x

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Cultural Skills	9.A Interact Effectively with Others	9.A.1 Know when it is appropriate to listen and when to speak	x	x	x	x
		9.A.2 Conduct themselves in a respectable, professional manner				x
9 Social and Cross-C	9.B Work Effectively in Diverse Teams	9.B.1 Respect cultural differences and work effectively with people from a range of social and cultural backgrounds				x
		9.B.2 Respond open-mindedly to different ideas and values	x	x	x	x
		9.B.3 Leverage social and cultural differences to create new ideas and increase both innovation and quality of work			x	
10 Productivity and Accountability	10.A Manage Projects	10.A.1 Set and meet goals, even in the face of obstacles and competing pressures	x	x	x	x
		10.A.2 Prioritize, plan, and manage work to achieve the intended result	x	x	x	x
	10.B Produce Results	10.B.1 Demonstrate additional attributes associated with producing high quality products including the ability to work positively and ethically	x	x	x	x
		10.B.2 Demonstrate additional attributes associated with producing high quality products including the ability to manage time and projects effectively	x	x	x	x
		10.B.3 Demonstrate additional attributes associated with producing high quality products including the ability to multi-task	x	x	x	x
		10.B.4 Demonstrate additional attributes associated with producing high quality products including the ability to participate actively, as well as be reliable and punctual	x	x	x	x
		10.B.5 Demonstrate additional attributes associated with producing high quality products including the ability to present oneself professional and with proper etiquette				x
		10.B.6 Demonstrate additional attributes associated with producing high quality products including the ability to collaborate and cooperate effectively with teams		x		x
		10.B.7 Demonstrate additional attributes associated with producing high quality products including the ability to respect and appreciate team diversity				x
		10.B.8 Demonstrate additional attributes associated with producing high quality products including the ability to be accountable for results		x		x
11 Leadership and Responsibility	11.A Guide and Lead Others	11.A.1 Use interpersonal and problem-solving skills to influence and guide others toward a goal		x	x	x
		11.A.2 Inspire others to reach their very best via example and selflessness				x
		11.A.3 Demonstrate integrity and ethical behavior in using influence and power				x
	11.B Be Responsible to Others	11.B.1 Act responsibly with the interest of the larger community in mind				x