

Standards Correlations

Game Design and Development (8400)

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
Demonstrating Personal Qualities and Abilities			
Demonstrate creativity and innovation.	English: 6.1, 6.3, 6.4, 6.6, 6.7, 6.9, 7.1, 7.3, 7.4, 7.6, 7.7, 7.9, 8.1, 8.3, 8.4, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WG.4, WHI.1, WHII.1 Mathematics: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.10, 6.11, 6.12, 7.2, 7.3, 7.8, 7.9, 8.2, 8.4, 8.6, 8.7, 8.11, 8.12, 8.17, 8.18, A.9, AFDA.3, AFDA.4, AFDA.5, AFDA.6, AFDA.7, AFDA.8, AII.9, COM.1, COM.3, COM.4, COM.5, COM.8, DM.7, DM.1*, DM.10, DM.2*, DM.3*, PS.3*, PS.4*, PS.7*, PS.9*, PS.10*		

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
	Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PS.1		
Demonstrate critical thinking and problem solving.	English: 6.1, 6.3, 6.4, 6.5, 6.6, 6.7, 6.9, 7.1, 7.3, 7.4, 7.5, 7.6, 7.7, 7.9, 8.1, 8.3, 8.4, 8.5, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WG.4, WHI.1, WHII.1 Mathematics: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.10, 6.11, 7.2, 7.3, 7.8, 7.12, 7.13, 8.2, 8.4, 8.8, 8.9, 8.10, 8.11, A.8, A.9, G.1, G.13, G.14, AFDA.3, AFDA.5, AFDA.8, AII.9, AII.10, AII.11, COM.1, COM.3, COM.4, COM.5, COM.8, DM.4, DM.7, DM.1*, DM.2*, DM.3*, DM.9*, PS.9*, PS.10* Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PS.1		
Demonstrate initiative and self-direction.	English: 6.1, 6.4, 6.6, 6.7, 6.9, 7.1, 7.4, 7.6, 7.7, 7.9, 8.1, 8.4, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1,		

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	11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Demonstrate integrity.	English: 6.1, 7.1, 8.1, 9.1, 9.5, 10.1, 10.5, 11.1, 11.5, 12.1, 12.5 History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Demonstrate work ethic.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: CH.1		
Demonstrating Interpersonal Skills			
Demonstrate conflict-resolution skills.	English: 6.1, 6.2, 6.4, 6.6, 6.7, 6.9, 7.1, 7.2, 7.4, 7.6, 7.7, 7.9, 8.1, 8.2, 8.4, 8.6, 8.7, 8.9, 9.1, 10.1, 11.1, 12.1		

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	History and Social Science: CE.1, CE.4, GOVT.1, USI.1, VUS.1		
Demonstrate listening and speaking skills.	English: 6.1, 6.2, 6.4, 6.6, 7.1, 7.2, 7.4, 7.6, 8.1, 8.2, 8.4, 8.6, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Demonstrate respect for diversity.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, USII.9, VUS.1, VUS.13, WG.1, WHI.1, WHII.1		
Demonstrate customer service skills.	English: 6.1, 6.4, 6.7, 7.1, 7.4, 7.7, 8.1, 8.4, 8.7, 9.1, 9.5, 9.6, 10.1, 10.5, 10.6, 11.1, 11.5, 11.6, 12.1, 12.5, 12.6 History and Social Science: CE.1, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Collaborate with team members	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1		

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	History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Demonstrating Professional Competencies			
Demonstrate big-picture thinking.	English: 6.1, 6.4, 7.1, 7.4, 8.1, 8.4, 9.1, 9.5, 10.1, 10.5, 11.1, 11.5, 12.1, 12.5 History and Social Science: CE.1, CE.4, CE.12, GOVT.1, GOVT.15, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Demonstrate career- and life-management skills.	English: 6.1, 6.7, 7.1, 7.7, 8.1, 8.7, 9.1, 9.6, 10.1, 10.6, 11.1, 11.6, 12.1, 12.6 History and Social Science: CE.1, CE.4, CE.12, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 8.4		
Demonstrate continuous learning and adaptability.	English: 6.1, 6.4, 6.7, 6.9, 7.1, 7.4, 7.7, 7.9, 8.1, 8.4, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8		

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	History and Social Science: CE.1, CE.3, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: BIO.1, CH.1, LS.1, PH.1, PH.4, PS.1		
Manage time and resources.	English: 6.1, 6.2, 6.4, 6.7, 6.9, 7.1, 7.2, 7.4, 7.7, 7.9, 8.1, 8.2, 8.4, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.2, 11.5, 11.6, 11.8, 12.2, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.10, 6.11, 6.12, 7.2, 7.3, 7.8, 7.9, 7.10, 7.11, 7.12, 7.13, 8.4, 8.11, 8.12, 8.13, 8.14, 8.17, 8.18, A.4, A.5, A.8, A.9, AFDA.3, AFDA.4, AFDA.5, AFDA.6, AFDA.7, AFDA.8, COM.1, COM.3, COM.5, COM.8		
Demonstrate information-literacy skills.	English: 6.1, 6.2, 6.4, 6.6, 6.7, 6.9, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 7.9, 8.1, 8.2, 8.3, 8.4, 8.6, 8.7, 8.9, 9.2, 9.5, 9.6, 9.8, 10.2, 10.5, 10.6, 10.8, 11.2, 11.5,		

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	11.6, 11.8, 12.2, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.10, 6.11, 7.8, 7.9, 8.11, 8.12, A.8, A.9, AFDA.3, AFDA.4, AFDA.6, AFDA.7, AFDA.8, DM.8, PS.1*, PS.2*, PS.3*, PS.4*, PS.7*, PS.8*, PS.9*, PS.10* Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PH.1, PS.1		
Demonstrate an understanding of information security.	English: 6.1, 6.2, 6.3, 6.4, 6.6, 6.7, 6.8, 6.9, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 7.8, 7.9, 8.1, 8.2, 8.3, 8.4, 8.6, 8.7, 8.8, 8.9, 9.1, 9.2, 9.5, 9.6, 9.8, 10.1, 10.2, 10.5, 10.6, 10.8, 11.1, 11.2, 11.5, 11.6, 11.8, 12.1, 12.2, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: COM.10		
Maintain working knowledge of current information-technology (IT) systems.	English: 6.1, 6.3, 6.4, 6.6, 6.9, 7.1, 7.3, 7.4, 7.6, 7.9, 8.1, 8.3, 8.4, 8.6, 8.9		

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	History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 7.8, COM.1, COM.2, COM.7, COM.9, COM.10, COM.11, COM.16, COM.18, PS.17 Science: BIO.1, CH.1, ES.1, PH.1		
Demonstrate proficiency with technologies, tools, and machines common to a specific occupation.	History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.10, 6.11, 7.9, 8.4, A.7, A.8, A.9, AFDA.1, AFDA.3, AFDA.5, AII.4, AII.7, AII.9, COM.1, COM.7, COM.10, COM.11, COM.12, COM.16 Science: CH.1, ES.1, LS.1, PH.1, PS.1		
Apply mathematical skills to job-specific tasks.	English: 6.4, 6.6, 6.7, 7.4, 7.6, 7.7, 8.4, 8.6, 8.7, 9.5, 9.6, 10.5, 10.6, 11.5, 11.6, 12.5, 12.6 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		

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	Mathematics: 6.1, 6.2, 6.5, 6.6, 6.12, 6.13, 6.14, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.8, 7.9, 7.11, 7.12, 7.13, 8.4, 8.5, 8.6, 8.8, 8.9, 8.10, 8.11, 8.12, 8.13, 8.14, 8.15, 8.16, 8.17, 8.18, A.1, A.3, A.4, A.5, A.7, A.8, A.9, AFDA.1, AFDA.3, AFDA.5, AFDA.8, AII.3, AII.7, AII.9, AII.10, COM.1, COM.7 Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PH.1, PS.1		
Demonstrate professionalism.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Demonstrate reading and writing skills.	English: 6.1, 6.6, 6.7, 7.1, 7.6, 7.7, 8.1, 8.6, 8.7, 9.1, 9.5, 9.6, 9.7, 10.1, 10.5, 10.6, 10.7, 11.1, 11.5, 11.6, 11.7, 12.1, 12.5, 12.6, 12.7 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: 6.1, PH.1, PS.1		

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Demonstrate workplace safety.	English: 6.4, 7.4, 8.4, 9.5, 10.5, 11.5, 12.5 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: CH.1		
Examining All Aspects of an Industry			
Examine aspects of planning within an industry/organization.	History and Social Science: GOVT.16		
Examine aspects of management within an industry/organization.			
Examine aspects of financial responsibility within an industry/organization.			
Examine technical and production skills required of workers within an industry/organization.			
Examine principles of technology that underlie an industry/organization.			
Examine labor issues related to an industry/organization.	History and Social Science: GOVT.16		

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
Examine community issues related to an industry/organization.	History and Social Science: GOVT.16		
Examine health, safety, and environmental issues related to an industry/organization.	History and Social Science: GOVT.16		
Addressing Elements of Student Life			
Identify the purposes and goals of the student organization.			
Explain the benefits and responsibilities of membership in the student organization as a student and in professional/civic organizations as an adult.			
Demonstrate leadership skills through participation in student organization activities, such as meetings, programs, and projects.			
Identify Internet safety issues and procedures for complying with acceptable use standards.			
Exploring Work-Based Learning			

Task	SOL Correlation	ITEEA National Standards	TSA Competitive Events
Identify the types of work-based learning (WBL) opportunities.			
Reflect on lessons learned during the WBL experience.			
Explore career opportunities related to the WBL experience.			
Participate in a WBL experience, when appropriate.			
Exploring the History, Culture, and Purpose of Games			
Define a <i>game</i> .	English: 9.3, 10.3, 11.3, 12.3	17. Information and Communication Technologies	Video Game Design
Differentiate between entertainment, serious games, and simulation.	English: 9.5, 10.5, 11.5, 12.5	17. Information and Communication Technologies	Video Game Design
Define terms associated with the game industry.	English: 9.3, 10.3, 11.3, 12.3	17. Information and Communication Technologies	
Examine the cultural connections and/or sensitivities of games.	English: 9.5, 10.5, 11.5, 12.5	4. The Cultural, Social, Economic, and Political Effects of Technology	
Analyze the influence of the game industry and serious games on society.	English: 9.5, 10.5, 11.5, 12.5	4. The Cultural, Social, Economic, and Political Effects of Technology	
Summarize the history of game development.	English: 9.5, 10.5, 11.5, 12.5	7. The Influence of Technology on History	
Interpret the significant role of controversy in the development of games.	English: 9.5, 10.5, 11.5, 12.5	17. Information and Communication Technologies	

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Identifying Ethical Concerns in Game Design			
Differentiate between public domain and intellectual property.	English: 9.5, 10.5, 11.5, 12.5	3. The Relationships Among Technologies and the Connections Between Technology and Other Fields	Video Game Design
Adhere to intellectual property laws.	English: 9.5, 9.8, 10.5, 10.8, 11.5, 11.8, 12.5, 12.8	17. Information and Communication Technologies	Video Game Design
Describe ethical issues related to the game industry.		6. The Role of Society in the Development and Use of Technology	
Analyze the implications of ethical and unethical behavior.	English: 9.5, 10.5, 11.5, 12.5		Video Game Design
Exploring Game Industry Fundamentals			
Identify game genres.	English: 9.5, 10.5, 11.5, 12.5	17. Information and Communication Technologies	
Differentiate among the classifications of games.	English: 9.5, 10.5, 11.5, 12.5	4. The Cultural, Social, Economic, and Political Effects of Technology	
Describe trends in the gaming industry.	English: 9.5, 10.5, 11.5, 12.5	17. Information and Communication Technologies	
Describe gaming hardware.	English: 9.5, 10.5, 11.5, 12.5	13. Assess the Impact of Products and Systems	
Identify organizational components associated with game design.	English: 9.5, 10.5, 11.5, 12.5		Video Game Design
Introducing Games			
Explain the foundations of a successful game.	English: 9.5, 10.5, 11.5, 12.5	17. Information and Communication Technologies	

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Describe the components of game design.	English: 9.5, 10.5, 11.5, 12.5	17. Information and Communication Technologies	Video Game Design
Design a game prototype.	English: 9.3, 9.5, 10.3, 10.5, 11.3, 11.5, 12.3, 12.5	11. Apply the Design Processes	Video Game Design
Create a physical model/mock-up of a game.		13. Assess the Impact of Products and Systems	
Develop a production plan for the game design.	English: 9.1, 10.1, 11.1, 12.1	17. Information and Communication Technologies	
Perform quality assurance (QA).	English: 9.5, 10.5, 11.5, 12.5	17. Information and Communication Technologies	Video Game Design
Examine a game for accessibility.	English: 9.5, 10.5, 11.5, 12.5	17. Information and Communication Technologies	
Create user documentation.	English: 9.5, 10.5, 11.5, 12.5	17. Information and Communication Technologies	Video Game Design
Examining Narrative Design			
Define <i>narrative design</i> .	English: 9.3, 10.3, 11.3, 12.3		
Identify the components of storytelling.	English: 9.5, 10.5, 11.5, 12.5	17. Information and Communication Technologies	
Explain perspective.	English: 9.5, 10.5, 11.5, 12.5		
Plan the setting.	English: 9.1, 10.1, 11.1, 12.1	11. Apply the Design Processes	Video Game Design
Evaluate game assets.	English: 9.5, 10.5, 11.5, 12.5		
Design game assets.	English: 9.1, 9.6, 9.7, 10.1, 10.6, 10.7, 11.1, 11.6, 11.7, 12.1, 12.6, 12.7	11. Apply the Design Processes	Video Game Design
Analyze a storyboard.	English: 9.3, 9.5	17. Information and Communication Technologies	
Creating Game Art			

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Animate game assets.	English: 9.5, 9.6, 9.7, 10.5, 10.6, 10.7, 11.5, 11.6, 11.7, 12.5, 12.6, 12.7	17. Information and Communication Technologies	Video Game Design
Create art for a game.		11. Apply the Design Processes	Video Game Design
Create a sprite.	English: 9.2, 10.2, 11.2, 12.2	11. Apply the Design Processes	Video Game Design
Edit an image using image editing software.	English: 9.2, 9.7, 10.2, 10.7, 11.2, 11.7, 12.2, 12.7	12. Use and Maintain Technological Products and Systems	Video Game Design
Apply the elements of design.	English: 9.5, 10.5, 11.5, 12.5	8. The Attributes of Design	Video Game Design
Apply the principles of design.	English: 9.5, 10.5, 11.5, 12.5	8. The Attributes of Design	Video Game Design
Describe the components of 3D images.	English: 9.6, 9.7, 10.6, 10.7, 11.6, 11.7, 12.6, 12.7 Mathematics: G.13, G.14	17. Information and Communication Technologies	
Create visual effects (VFX) for games.	English: 9.1, 10.1, 11.1, 12.1	12. Use and Maintain Technological Products and Systems	Video Game Design
Incorporating Audio Components in Game Design			
Manipulate sounds.	English: 9.2, 10.2, 11.2, 12.2	17. Information and Communication Technologies	Video Game Design
Incorporate sounds appropriate to a particular game scenario.	English: 9.2, 10.2, 11.2, 12.2	17. Information and Communication Technologies	Video Game Design
Evaluate the role of sound and music.	English: 9.5, 10.5, 11.5, 12.5		Video Game Design
Utilizing Logic and Programming			

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Identify types of game engines.	English: 9.5, 10.5, 11.5, 12.5		Video Game Design
Identify game engines.	English: 9.5, 10.5, 11.5, 12.5	12. Use and Maintain Technological Products and Systems	Video Game Design
Identify game development techniques.	English: 9.5, 10.5, 11.5, 12.5	17. Information and Communication Technologies	Coding
Describe different platforms for game development.	English: 9.5, 10.5, 11.5, 12.5	12. Use and Maintain Technological Products and Systems	Coding
Apply a script.	English: 9.5, 10.5, 11.5, 12.5	17. Information and Communication Technologies	
Building a Game			
Complete a game design document.	English: 9.6, 9.7, 10.6, 10.7, 11.6, 11.7, 12.6, 12.7	17. Information and Communication Technologies	
Develop storyboards.	English: 9.1, 9.6, 9.7, 10.1, 10.6, 10.7, 11.1, 11.6, 11.7, 12.1, 12.6, 12.7 Mathematics: G.3, G.4, G.14	11. Apply the Design Processes	
Create games.	English: 9.2, 10.2, 11.2, 12.2	12. Use and Maintain Technological Products and Systems	Video Game Design
Examining Marketing Strategies			
Explain how market segmentation is used to identify a target market.	English: 9.5, 10.5, 11.5, 12.5		

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Examine marketing strategies and their importance.	English: 9.1, 9.5, 10.1, 10.5, 11.1, 11.5, 12.1, 12.5 Mathematics: COM.1, PS.1*, PS.2*, PS.3*, PS.4*, PS.8*, PS.9*	7. The Influence of Technology on History	
Preparing for Career Opportunities			
Compile a multimedia portfolio.	English: 9.2, 9.6, 9.7, 10.2, 10.6, 10.7, 11.2, 11.6, 11.7, 12.2, 12.6, 12.7	17. Information and Communication Technologies	Video Game Design
Explore careers associated with game design.	English: 9.8, 10.8, 11.8, 12.8		