Design
Subject Group Overview

*Year 1 is taught in the Science course, see Science Year 1 subject group overview for the Design Year 1 Units.

Year 2:	Key Concept Related Concept(s) and Global Context	Statement of Inquiry	Inquiry Questions	ATL Skill(s)	Summative Assessment	MYP Objective	Content
Unit 1: Graphic Design	Communication form, perspective Identities and Relationships	Graphic Designers use fonts, images, and colors to intentionally convey an objective message from a client to an audience.	Factual: Are Graphic Design and art the same thing? Conceptual: How are effective designs different from ineffective designs? Debatable: Why are certain graphic designs good or bad?	Communication: use a variety of media to communicate with a range of audiences. Self-Management-Reflective skills: consider ethical, cultural, and environmental implications. Self-Management-Reflective skills: keep a journal to record reflections	Students will combine font, color, and image to create a book cover. They will create a design specification in Google Docs, and then use the Canva app to construct the cover. The student will also complete a reflective document evaluating the success of their product against their design criteria.	A: Inquiring and Analyzing i. B: Developing Ideas i. ii. C: Creating the Solution ii. iii. D: Evaluating ii.	-Color choices/combinations and their meanings -Fonts and their meanings -Using images to convey ideas -Communication of existing book covers -Google Docs - practice making a copy of a doc, naming it, and answering questions in it. -Uploading pictures to classroom -Some technical tasks in Canva. -Intellectual property rights of images
Unit 2: Podcasting and audio communication	Communication Function, Adaptation Personal and Cultural Expression	Effective audio content creators use spoken words, music, and sound effects to adapt ideas and information when communicating to	Factual: How do audio communicators present information differently than visual communicators? Conceptual: What are some advantages and disadvantages of presenting information through recorded	Self-Management-Organization Skills: manage time and tasks effectively. Thinking skills-Transfer: use skills	Students will adapt a previously completed project from another class into an audio product. Students will complete a reflective document detailing their thoughts	A. Inquiring and Analyzing iii. B. Developing Ideas ii. iii. iv.	-Garageband specific task tutorials and videos -Example podcasts and discussions of their effectiveness -Audio recording vocabulary:

		a listening audience	audio, as opposed to live and in person? Debatable: What makes a podcast "good" or "bad?"	and knowledge in multiple contexts.	and ideas through the process of creation and adaptation.	C. Creating the Solution i. ii. iii. iv. D. Evaluating iii. iv.	Gain, mic, split, compressor, loop, pitch, speed, level, fx
Unit 3: Film Production	Communication Perspective Personal and Cultural Expression	Conveying a message through film requires knowledge of your audience, a mastery of editing tools, and command of the medium's communication conventions.	Factual- What do various angles, cuts, and framing techniques communicate to the viewer? Conceptual- How can we keep our films' massage clear? What kinds of messages are best conveyed through film? Debatable- What should be the top priority of a film producer - social good or making money?	Thinking: Media Literacy Skills: communicate information and ideas effectively to multiple audiences using a variety of media and formats Thinking: Critical Thinking Skills: identify obstacles and challenges.	Students will identify a need through research, and will create a film for the target audience of an incoming LILA 6th grade student. The film will help reduce a specific fear the 6th grader may have, or teach a concept/skill that helps to ease the transition to LILA and Middle School.	A: Inquiring and Analyzing i. ii. iv. B: Developing Ideas ii. iii. iv. C: Creating the Solution i: ii. iii. D: Evaluating iv:	Experimentation with the iMovie app Multiple help and "how to" videos demonstrating filming, editing, and communication techniques Practice creating and following storyboards Practice filming "out of order" and editing shots together into a coherent story
Unit 4: Website Design	Communication, Perspective, Form	Successful website designers must consider the perspectives and abilities of end users in order to present information and opportunity to as many people as possible	Factual- How does knowledge of the F pattern inform the arrangement of information on a website? Conceptual- How can you make text more readable using color and font? Why is it important to make information on a website accessible? Debatable- Should web designers sometimes make some content LESS	Information Literacy Skills: understand and implement intellectual property rights. Media Literacy Skills: locate, organize, analyse, evaluate, synthesize and ethically use information from a	Students will use the Weebly app to create a portfolio website that showcases and explains some of the finished work they've done as a student at LILA. They can post images, text, video, and/or audio to their website.	A: Inquiring and Analyzing i.,ii.,iii B: Developing Ideas Ii., iv. C: Creating the Solution I., ii., iii., iv.	Discussion on accessibility and the concept of designing for those with disabilities. Lecture/Discussion on the Principles of Good Web Design.

			accessible?	variety of sources and media.			

Year 3:	Key Concept Related Concept(s) and Global Context	Statement of Inquiry	Inquiry Questions	ATL Skill(s)	Summative Assessment	MYP Objective	Content MN State Standards
Unit 1: Graphic Design	Communication form, perspective Identities and Relationships	Graphic Designers use fonts, images, and colors to intentionally convey an objective message from a client to an audience.	Factual: Are Graphic Design and art the same thing? Conceptual: How are effective designs different from ineffective designs? Debatable: Why are certain graphic designs good or bad?	Communication: use a variety of media to communicate with a range of audiences. Self-Management-Reflective skills: consider ethical, cultural, and environmental implications. Self-Management-Reflective skills: keep a journal to record reflections	Students will combine font, color, and image to create a book cover. They will create a design specification in Google Docs, and then use the Canva app to construct the cover. The student will also complete a reflective document evaluating the success of their product against their design criteria.	A: Inquiring and Analyzing i. B: Developing Ideas i. ii. C: Creating the Solution ii. iii. D: Evaluating ii.	-Color choices/combinations and their meanings -Fonts and their meanings -Using images to convey ideas -Communication of existing book covers -Google Docs - practice making a copy of a doc, naming it, and answering questions in it. -Uploading pictures to classroom -Some technical tasks in Canva. -Intellectual property rights of images
Unit 2: Game Design	Systems Invention, Ergonomics	Games can be designed as interactive learning systems to build a player's ability in a skill area by making learning and practice more enjoyable.	Factual: Is learning with games effective? Conceptual: How do you break down programming instructions into the simplest and most direct constituent parts?	Self-Management-Organization Skills: manage time and tasks effectively. Thinking skills-Transfer: use skills and	Students will construct a game with their ipads using the app "Hopscotch." This game will be for a target audience of 6th grade math students who need practice on a specific math skill.	A: Inquiring and Analyzing i. ii. B: Developing Ideas ii.	Daily Coding goals: -Character movement and coordinates -collisions -global and local variables -sounds -color and size changes for characters

	Scientific and Technical Innovation		Debatable: Can games completely replace traditional learning?	knowledge in multiple contexts.	Students will also complete a document asking them to journal, reflect on their thinking, and demonstrate understanding of how to create a virtual environment for a user.	C: Creating the Solution i: iii. iv: D: Evaluating i: iv:	
Unit 3: Website Design	Communication, Perspective, Form	Successful website designers must consider the perspectives and abilities of end users in order to present information and opportunity to as many people as possible	Factual- How does knowledge of the F pattern inform the arrangement of information on a website? Conceptual- How can you make text more readable using color and font? Why is it important to make information on a website accessible? Debatable- Should web designers sometimes make some content LESS accessible?	Information Literacy Skills: understand and implement intellectual property rights. Media Literacy Skills: locate, organize, analyse, evaluate, synthesize and ethically use information from a variety of sources and media.	Students will use the Weebly app to create a portfolio website that showcases and explains some of the finished work they've done as a student at LILA. They can post images, text, video, and/or audio to their website.	A: Inquiring and Analyzing i.,ii.,iii B: Developing Ideas Ii., iv. C: Creating the Solution I., ii., iii., iv.	Discussion on accessibility and the concept of designing for those with disabilities. Lecture/Discussion on the Principles of Good Web Design.

Year 4/5:	Key Concept Related Concept(s) and Global Context	Statement of Inquiry	Inquiry Questions	ATL Skill(s)	Summative Assessment	MYP Objective	Content MN State Standards
Unit 1: **Graphic Design**	Communication form, perspective Identities and Relationships	Graphic Designers use fonts, images, and colors to intentionally convey an objective message from a client to an audience.	Factual: Are Graphic Design and art the same thing? Conceptual: How are effective designs different from ineffective designs? Debatable: Why are certain graphic designs good or bad?	Communication: use a variety of media to communicate with a range of audiences. Self-Management-Reflective skills: consider ethical, cultural, and environmental implications. Self-Management-Reflective skills: keep a journal to record reflections	Students will combine font, color, and image to create a book cover. They will create a design specification in Google Docs, and then use the Canva app to construct the cover. The student will also complete a reflective document evaluating the success of their product against their design criteria.	A: Inquiring and Analyzing i. B: Developing Ideas i. ii. C: Creating the Solution ii. iii. D: Evaluating ii.	-Color choices/combinations and their meanings -Fonts and their meanings -Using images to convey ideas -Communication of existing book covers -Google Docs - practice making a copy of a doc, naming it, and answering questions in it. -Uploading pictures to classroom -Some technical tasks in Canva. -Intellectual property rights of images
Unit 2: **3D Modeling and Printing**	Development Form, Function Scientific and Technical Innovation	3D modeling software, combined with additive manufacturing processes, allow designers to customize products that can integrate into, or optimize, existing products or systems	Factual: What printing materials and printer settings are optimal for certain specific products? Conceptual: How has, or how will, the decentralization and democratization of manufacturing change product development? Debatable: Should certain designs, like guns or other weapons, be regulated or restricted?	Self-Management-Organization Skills: set goals that are challenging and realistic Self Management - Affective skills: demonstrate persistence and perseverance.	Students will create a 3D printed solution to a real world problem or need. (For fall of 2017, the need was for large and difficult-to-lose keychains for the technology department's computer cart keys.)	A: Inquiring and Analyzing i. B: Developing Ideas i. ii. C: Creating the Solution ii. iii. D: Evaluating i: ii. iv:	Affordances/Constraints of different additive materials. (PLA vs ABS) Additive manufacturing techniques 3D printer settings and what they mean 3D modeling software

Updated on 2.20.18

Unit 3: Website Design	Communication, Perspective, Form	Successful website designers must consider the perspectives and abilities of end users in order to present information and opportunity to as many people as possible	Factual- How does knowledge of the F pattern inform the arrangement of information on a website?
			
			Conceptual- How can you make text more readable using color and font?
			Why is it important to make information on a website accessible?
			
			Debatable- Should web designers sometimes make some content LESS accessible?
				Information Literacy Skills: understand and implement intellectual property rights.
				
				Media Literacy Skills: locate, organize, analyse, evaluate, synthesize and ethically use information from a variety of sources and media.
					Students will use the Weebly app to create a portfolio website that showcases and explains some of the finished work they've done as a student at LILA. They can post images, text, video, and/or audio to their website.	A: Inquiring and Analyzing
						   i.,ii.,iii
						
						B: Developing Ideas
						   Ii., iv.
						
						C: Creating the Solution
						  I., ii., iii., iv.
							Discussion on accessibility and the concept of designing for those with disabilities.
							
							Lecture/Discussion on the Principles of Good Web Design.