



# Digital Art, Design, & Media Master

## Competency

Student understands the variety and value of and uses digital art, design, and media to create projects.

## Key Method

Student uses a range of digital art, media, and design tools and principles to create projects.

## Method Components

### What is digital art, design, and media?

Art, design, and media, while unique and individual fields on their own, can be thought of as the combination of creativity and communication. Art, design, and media are not just about making “things that look good”, but are especially important in a technology-driven, communication-focused world.

Digital art is, quite simply, artistic work that uses digital technologies in either its creation or presentation (or both). Digital design is the process of imagining, planning, and creating using digital technologies. Digital media is focused on digital communication outlets and tools.

These three connected areas allow you to find new ways to create and to express yourself in both digital and “real-world” settings.

### STEM vs STEAM: Why Digital Art, Design, and Media Matters

Over the last several years, a focus on STEM education has become mainstream across the world, with an understanding that jobs in STEM fields are growing at a rate of close to 8%,



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compared to just 3.7% for non-STEM jobs. STEM needs skilled workers to meet the needs of the 21st century, and the need for people skilled in creative technology fields is increasing.

Stated simply, STEAM is STEM plus the arts (including visual art, music, drama, dance, language, and more). This emphasizes the fact that, for example, there is no scientific discovery without creativity, there is no engineering without design, and creativity is fundamental to the innovation and success of technology. To find fulfilment and build the skills you need for success in the 21st century, you must explore and hone your creativity.

This is where digital art, design, and media come into play. Through the combination of digital technologies and a range of creative expression, you are able to explore the true embodiment of STEAM. From exploring the role of 3D design in health, architecture, and manufacturing to investigating the mathematics of animated films, these opportunities allow you to build and apply your skills in authentic contexts.

## 5 Skills of Great Creatives

Creating great digital art, design, and media projects is about more than just technical skill. Here are the 5 main skills you need to succeed:

### 1. Understanding Technology Concepts

An important part of digital art, design, and media is knowing how to use a range of tools to support your work. Great creatives understand the fundamental principles of design as well as how to use a range of digital tools. They recognize that many fundamental concepts of art, design, and media are consistent across many mediums, and use that knowledge to their advantage.

### 2. Critical Thinking and Problem Solving

Great creatives know that mistakes are essential to learning. They recognize that *something* is likely to go wrong or present a challenge every time they work on a project. They are able to analyze problems, break them down into smaller steps, and work through them while still keeping their cool. They use their previous knowledge and experience to find appropriate solutions and approaches to achieve their goals.

### 3. Communication and Collaboration

Great creatives communicate effectively with others about their learning and work in a variety of contexts. They are able to work independently and with others to create projects, share experiences, and build skills.

### 4. Knowledge Constructor

No single person, course, or video can teach you everything you need to know about digital art, design, and media. Great creatives know that they need to combine their knowledge and skills in new settings to find solutions to new problems and create new projects. They are also able to use a variety of resources and tools to build new knowledge independently.

### 5. Digital Citizenship



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With great creative power comes great responsibility. Great creatives recognize the power of digital art, design, and media to shape the world around them and use their skills responsibly. They respect the work of others, are kind online, and always keep an eye on cybersecurity to keep themselves safe.

## Supporting Rationale and Research

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## Submission Guidelines & Evaluation Criteria

To earn the micro-credential, you must receive a passing evaluation for Parts 1 and 3 and a “Yes” for Part 2.

### Part 1. Overview Questions

1. How old are you?
2. How would you rate your confidence when it comes to STEM? (out of 5 stars)
3. How would you rate your ability when it comes to STEM?
  - a. I’m a total beginner; I’ve never done this before.
  - b. I’m pretty new to this; I have only a little bit of experience.
  - c. I’ve got some experience and am looking to take my learning to the next level.
  - d. I’ve got lots of experience, and I’m ready for more advanced stuff!
4. How would you rate your interest in exploring a STEM career when you get older? (out of 5 stars)
5. What are you most hoping to get out of your STEAM Hub course? Why?

**Passing:** The participant has responded to the survey answering all of the question prompts.

### Part 2. Work Examples/Artifacts/Evidence

To earn this micro-credential, submit the following artifacts:

#### Artifact 1: Badges

1. Badge for at least THREE of the following STEAM Hub courses:
  - a. 3D Design with Tinkercad



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- b. Storytelling with Minecraft
- c. Computer Music
- d. 2D Design
- e. Animation

**Artifact 2: STEAM Hub Course Final Project**

For the STEAM Hub course you selected above, please submit a copy of your final project. It must include:

- the full project file (please do not submit screenshots)
- any relevant share settings appropriately set to allow anyone to view the project

**Part 2. Scoring Guide**

Artifact	“Yes”	“Almost”	“Not Yet”
Artifact 1	The course badges were provided.	N/A	The course badges were not provided.
Artifact 2	The project provided meets the expectations as outlined in the project rubric within the STEAM Hub course at a level of 80% or higher.	The project provided meets the expectations as outlined in the project rubric within the STEAM Hub course at a level of less than 80%.	The project was not provided.

**Part 3. Reflection**

Please write your responses below (500 words maximum).

1. What was the most challenging part of creating your project? How did you deal with these challenges?
2. What part of your project are you most proud of? Why?
3. Discuss what you have learned about digital art, design, and media. Could you see yourself pursuing a career in this industry? Why or why not?

**Passing:** Response provides reasonable and accurate information that outlines their experience with learning digital art, media, design. Student demonstrates a genuine attempt to reflect on their learning process and how their learning will influence their future.



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