**Project Brief: Ancient Coin**

**It’s all about the tools and the process!**

“Design thinking” skills can be developed while thinking about the form, function, aesthetics, and creation of currency such as coins. Students should think critically about the design features included in money, the functional and aesthetic design requirements, available resources and technology for manufacturing, and more as they create a 3D model of a coin. Students begin by formulating and answering some key questions:

* What is the primary function of the coin?
* What are the design features that will support the basic function of the coin?
* What is the ideal size, shape, and weight of the coin?
* What materials are best suited to make a coin?
* How will you express symbolic elements in your coin?
* How will you use artwork in the coin design?
* What time period, geographic location, and people is your coin designed for?
* What cultural message does your coin convey?

**Process**:

For this coin project, the first task is to develop basic skills in using Autodesk® 123D Design® software to develop concepts as part of the Design Thinking ideation stage. After completing the sample Chinese coin, students are encouraged to develop their own designs and apply their knowledge of the software to generate multiple concepts for alternative designs. The bottom line is this: if students can expand and enhance their ability to combine the innovation capabilities of the software, the power of the design thinking process, and elements of history, then the goals of this curriculum have been achieved.

**Design considerations used in the example project are as follows**:

* Purpose: Is the coin a practical design that could achieve its intended function?
* Design: What does the coin look like? What is the coin made of? How large is it?
* Audience: Who will be using the coin? What is important to them?
* Mass production: Can the coin design scale up to mass production?
* Scheduling requirements: 5 to 6 hours