Framework for Individual Classroom Interdisciplinary Study

Individual Teacher (Art) determines:

a. **Topic/Issue** (3D Kinetic Sculpture based on simple machines)
b. **Essential Questions** (1. What issues arise when motion is added to three-dimensional designs? 2. What do scientists and artists have in common in their creative processes? 3. Can art be science and can science be art? What are the differences?)

c.) Arts **Unit Learning Goals** based on standards
d.) Arts **Teaching and Learning Activities** using 3D Kinetic Sculpture as focus for curriculum with assistance from physics and industrial technology teachers
e.) **Arts assessments** based on Arts Learning Goals

And invites Physics teacher and Industrial Technology Teacher to work with students

Physics teacher explains simple machines and leads students in creating paper models of simple machines
(*essential content of a typical physics standard)*

Industrial Technology teacher assists by:

1. posing design problem for students to solve
2. facilitating student use of tools and procedures for creating final kinetic sculptures

(essential content in typical industrial technology standards)

a.) for use in the traditional structure of middle school or high school where teachers do not share the same students, but does require support from administration for teachers to collaborate and work within each other's classrooms. (Art teacher may have to take physics class while physics teacher is in art class)
b.) promotes teamwork and collegial relationships among teachers as well as helping students