

# 11th Grade EDP Boat Project

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| <b>Overriding Theme</b><br>The American Voice and Identity |
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|                            | English  | History  | Design  | Math   |
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| <b>Learning Objectives</b> | 1. Star Spangled Banter<br><br>2. American voice<br>3. Elements of rhetoric: ethos, pathos, logos, 7 evidence types<br>4. Writing conventions: sentence variety, verb use, active voice<br>5. ABC of timed writing: early prep for EAP | 1. Motives for and settlement patterns of the English in N. America<br><br>2. Significance of maritime trade in Colonial U.S. & Protest against Navigation Acts<br>3. Role of Sailors in Sparking Revolution.<br>4. James Chalmers & The Loyalist Cause<br><br>5. The Continental Navy Fiasco<br>6. The Federalist Model & Building a Navy | 1. Ship Types & Uses: Galleon, xebec, Frigate, Ship of the Line, Schooner & types of rigging<br>2. Ship architecture<br>Soft/ hard chine hulls, bulkheads, girders, stanchons, keel, rudder, bow, stern, draft, beam<br>3. Ship design - Sketching a sail plan<br><br>4. Ship building<br>5. Sustainable design<br>Power Source & Materials - | 1. Measure materials for building<br><br>2. Estimate cost of supplies<br>3. Estimate cost of wasted materials<br>4. Calculate bouyancy |
| <b>Lesson Connections</b>  | Star Spangled Banter<br>Elements of Rhetoric:<br>The Crisis Part 1<br>Thomas Paine & Patrick Henry<br>Writing Conventions  | The war of 1812<br>Attack on baltimore<br>Elements of Rhetoric:<br>Common Sense v. Plain Truth (Cut & Paste)<br>King George III break up letter  | Application of math / design learning objectives  | Application of learing objectives  |
| <b>Project Alignment</b>   | Essay: Argument based on Fulbright quote - criticism is patriotic  | James Chalmers & Six Frigates - U.S. unprepared for war  | Will student ships hold up better than Continental Navy?  | Dimensions document of boat sketch   |

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| <b>Culminating Project</b> | Test boat design in pool<br>Sailing in San Diego Bay! |
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