MAKER PROJECT RUBRIC

	Tier 1: De Minimis	Tier 2: Developing	Tier 3: Proficient	Tier 4: Sophisticated
The Maker Mindset				
Inquiry: *Makers value what Dale Dougherty calls "experimental play" and "lifelong kindergarten", reflected in an inquisitive spirit and multiple ways of approaching any question.* ***How does the student attack the question or problem?***	• Little evidence of effort spent investigating options • Little evidence of thought given to creative solutions • Only one idea is investigated	• Some effort to investigate two or more options • Interest in creative solutions is evident, but undeveloped • Evidence of more than one idea present, but undeveloped	• Multiple options investigated • Clear evidence of creative solutions • Clear development and extension of creative thinking • At least two ideas explored in some depth	• Demonstrable efforts to try multiple solutions and ask provocative questions • Inquiry leads to rich and unique results • Multiple ideas explored and expanded upon
Growth: *The maker mindset values each new challenge as a chance to learn and grow. A project that requires no new skills produces no new knowledge.* ***Does the student's work reflect a desire to expand their skill set?***	• No evidence of new learning • No attempt to use new methods	• Some evidence of new learning • Evident attempt at unfamiliar methods (possibly without success)	• Substantial evidence of new learning or use of unfamiliar methods • Project demonstrates acquisition of at least one new skill	• Clear use of multiple avenues of learning and new methods • Project demonstrates synthesis of multiple newly-acquired skills
Creativity: *Creative and unique expression of ideas is the hallmark of an expert maker.* ***Is the project developed in an original way?***	• Project follows instructions without alteration or embellishment	• Project presents an original idea, but presentation relies on existing work or ideas	• Project presents an original idea in an new way	• Project synthesizes multiple ideas in a new or novel presentation
Iteration: *Making relies heavily on iterative, incremental improvement. Ideally a superior project will be iterated several times before completion.* ***Has the project been successfully revised and improved one or more times?***	• Project clearly based on a single first-draft design	• Project shows at least one attempt at iterative improvement of design and/or functionality (without success)	• Project shows at least one successful attempt at iterative improvement of design and/or functionality	• Project demonstrates multiple iterations to improve project's design and/or functionality
Reflection & Understanding: *In making, process is just as important as product. Choice means risk.* ***Does the student understand their process, the content of the project, and the consequences of their development choices?***	• Little evident awareness of process • Little evident understanding of content • Weak or absent justification of choices	• Some self-awareness in evidence • Some understanding of content in evidence • Student cannot justify all of their choices	• Clear self-awareness • Clear understanding of content • Most choices are made consciously and with justification	• Work reflects a deep understanding of the complexities of the process and content • Every choice shows clear purpose and thought
Effort: *Attention to detail matters, and polish is the difference between a skilled maker and a dilettante.* ***How much effort did the student expend, and how much care was taken?***	• Work is incomplete or unsatisfactory • Effort does not meet stated requirements	• Work complete but unsophisticated • Effort is just sufficient to meet requirements	• Work complete and above average • Effort is evident, but falls short of excellence	• Work completed with élan • Effort surpasses instructor expectations
Initiative: *Frustrations, roadblocks and dead ends are par for the course in making.* ***How did the student respond to challenges?***	• Complications halt progress • No independent problem solving • No attempts to resolve outside of class	• Complications slow progress substantially • Minimal independent problem-solving • No attempts to resolve outside of class	• Complications are met head-on • Substantial independent problem-solving • Substantial effort expended outside of class	• Student attacks complications with relish and resolve • Student solves problems without need for assistance
Community: *The maker mindset means first learning, then sharing. This builds the communal store of knowledge, and is a critical part of even the smallest projects.* ***Did the students attempt to share their learning and knowledge as widely as possible?***	• No attempt to share experience and learning	• Basic attempt to share learning and experience • Sharing hampered by use of obscure or proprietary tools, and/or inadequate explanation	• Informal, peer-to-peer sharing or learning and experience • Adequate explanation of shared material • Sharing may still be hindered by selected technologies	• Learning and experience shared with the wider community in a formal and structured way • Sharing marked by thorough explanation • Evidence of consideration for future access (open technologies, popular platforms, interoperable/ archivable file formats)
Execution				
Technique: *Though ultimately less important that process, product does matter in the progression from novice to expert maker.* ***Does the student's work reflect their grasp of the material, concepts and skills involved?***	• Work shows little understanding of concepts, materials, and skills	• Work shows some understanding of concepts, materials and skills	• Work shows substantial understanding of concepts and materials, and uses learned skills	Work shows deep understanding of concepts and materials, and mastery of learned skills
Craft: *As with technique, this matters less than process, but does matter.* ***How does the student's craft stack up?***	• Work is sloppy or unrefined • Craft is lacking and reduces presentation quality	• Work lacks polish and attention to detail • Craft is weak and noticeably reduces presentation quality	• Work is polished and shows attention to detail • Craft evinces care and enhances presentation quality	• Work is impeccable in every detail • Craft shows extreme care and thoughtfulness • Excellent presentation
Responsibility: *This does not apply to every project, but is worthy of consideration for projects that make use of community workspaces.* ***Is the student a thoughtful and safe user of shared resources?***	• Lack of respect for materials and tools • Failure to clean up after completing work • Flagrant disregard for shop and safety rules	• Cares for tools and materials, but requires reminders • Requires reminders to clean up • Lax attitude toward shop and safety rules	• Regularly cleans up tools, materials, and waste after work • Follows safety rules • Generally follows shop rules, with occasional reminders	• Shows pride in maintaining a neat shop • Diligent about clean up and ownership of work • Effort above and beyond basic shop maintenance requirements • Diligent attention to all shop and safety rules

Based substantially upon rubrics developed by Lisa Yokana (https://goo.gl/KQJM1M), and Scott Dellosso and the Digital Harbor Foundation (https://goo.gl/YF66dk) ©2016.

Grading Scale: Tier 1 = 4 points. Tier 2 = 5 points. Tier 3 = 6 points. Tier 4 = 7 points.
Maximum possible score: 77

Pts	Score
77	100%
76	99%
75	97%
74	96%
73	95%
72	94%
71	92%
70	91%
69	90%
68	88%
67	87%
66	86%
65	84%
64	83%
63	82%
62	81%
61	79%
60	78%
59	77%
58	75%
57	74%
56	73%
55	71%
54	70%
53	69%
52	68%
51	66%
50	65%
49	64%
48	62%
47	61%
46	60%
45	58%
44	57%