Maker learning maturity matrix

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|  | Beginning | Exploring | Integrating | Embedded |
| **Faculty and Staff** | There is one (or a small group of) teacher-champion interested in making. The champion is aware of he national conversation around making and maker education and is beginning to find ways to do maker work with students. | The teacher-champion offers a making or STEAM class or club for interested students - often by volunteering free-time or taking on an extra duty. | More teachers become excited about how they can integrate making into their own teaching practice and subject areas. The teacher-champion becomes a facilitator for these activities. | Making is ingrained in the culture of the school. Teachers use making in all aspects of their curriculum as a way to open up new possibilities for student agency and to facilitate authentic collaborations between disciplines. |
| **Administration** | There is no admin support, but the administration is not blocking. | The administration is curious and pleased with the stories being generated in the class and levels of student engagement. | Administration supports interested teachers integrating maker learning by providing collaborative planning opportunities, material resources, and professional development. Teaching or coordinting maker learning activities and materials becomes and official part of the teacher-champion’s role. | Administration becomes champions of maker learning, dedicating significant resources to it and designing school structures and systems to accommodate open-ended projects, assessments, and collaborations. Teachers are expected to integrate maker learning into their programs and the teacher-champion is tasked entirely with supporting this work. |
| **Tools and Space** | The teacher-champion may seek funding for or receive a new tool like a 3D printer but does not know fully how it will be used, or the teacher-champion may not have a clear sense of what tools are needed and is seeking to evaluate some options. | There is a space or some access to tools such as a cart. Frequently there is a focus on 3-D printers or other high-tech tools. The tools are typically in a space used only by one teacher or class. | School has a space or mobile solution that can be used by more teachers. This space features a combination of low and high tech tools and materials. The teacher-champion likely still oversees the space, but it is used by other teachers as well. | The space becomes a central and shared resource for the school. There may still be an owner of the space, but he or she becomes a facilitator for others’ usage, not the sole provider of services. |
| **Curricular Integration** | None. | There is a separate class or club for maker learning activities - often focused on one tool or skill like robots or 3D printing. | The champion has started outreach to other teachers, who jointly develop projects supporting their subject areas. Several classes across the curriculum are engaging in at least one student-centered hands on project each school year. | Projects are deeply integrated into every aspect of the school. Classwork consists of projects that are co-created and coowned by teachers and students across disciplines |
| **Assessments** | None. | Making is typically situated in a class or club that has limited or no assessment requirements. What assessments there are are unstructured and informal. | Teachers struggle to find ways to assess the making they are integrating into their curriculum - workaround systems are created or maker projects go unassessed within formally assessed classes. | Schoolwide practice and systems change to create assessment structures that accommodate maker learning by allowing for more formative assessment, student reflection, and collaborative evaluation of learning between teacher and student. |
| **Funding/ Budgets** | Making activities use already available or donated materials. | School contributes a small amount of the technology budget to acquire some tools and/or teacher crowdfunds for supplies. | School or district dedicates a meaningful level of funding to provide necessary tools and consumables for projects as well as to support faculty time spent planning and integrating maker learning into practice. | School or district dedicates a significant level of funding to ensure that tools, materials, and supports are in place to allow all teachers to incorporate maker learning into their practice. |