OVERVIEW OF FIELD SITE VISITS

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RESEARCH BRIEF



Introduction

This research brief introduces the three makerspaces we collaborated with and provides an overview of their portfolio processes.

By makerspaces, we mean maker-centered, youth-oriented settings that focus on educational programming. The specific portfolio systems of our three sites are covered in more detail in a series of short briefs, one dedicated to each, including demographic information and descriptions of how youth capture and share their work (see Research Briefs 12A, 12B, and 12C). This series of briefs exemplifies how a diverse set of maker-centered learning environments is integrating the documentation and sharing of youth work into everyday practice; it also shares the techniques employed to balance key tensions around assessing open portfolios (see Research Brief 11, "Introducing Phase 2 of the Open Portfolio Project: Assessment in Makerspaces").

Where Phase 1 of the Open Portfolio Project (OPP) focused on surveying the landscape identifying maker education settings with portfolio practices, Phase 2 dives deeper into specific portfolio practices and compares implementations of portfolio assessment in and out of school. The three sites featured in this series are:

- 1. The Digital Harbor Foundation Tech Center
- 2. Monticello High School
- 3. High Tech Elementary Chula Vista

These sites were selected for their lengthy history of portfolio implementation experiences, which complemented our out-of-school observations at school-based sites. (Two of the three overlapped from the Phase 1 OPP work.) An overview of each site is provided below.

Maker Education Settings

The *Digital Harbor Foundation Tech Center* (DHF, Figure 1) is an after-school makerspace in Baltimore, Maryland. DHF offers themed summer camps (e.g., 3D printing or digital filmmaking), open-ended member programs, foundational courses, and entry-level maker introductory courses. Over the years, DHF has been iteratively refining their portfolio practice, including providing all youth with an individual WordPress website where they're encouraged to document projects, processes, and reflections on their maker work with digital and tangible materials. Further, the site aggregates individual portfolios to reflect the most current projects of individual youth participants in one shared space and to encourage viewers to browse and explore what youth are doing at DHF.

As an out-of-school maker setting, Digital Harbor Foundation works carefully to identify youth motivations that support documentation and development of portfolio practices, particularly in an environment where membership is voluntary. DHF fosters a strong sense of community and therefore also balances its desire for youth to capture individual work with the opportunity to share its collective work as an overall community and organization. It offers opportunities for physical project display and public showcases, and it has established a youth steering committee that gives voice to youth experiences and opinions throughout the iterative refinement of its portfolio efforts.

More information about DHF's portfolio system and practices can be found in **Research Brief 12A**.



Figure 1: The Mega Lab of the Digital Harbor Foundation Tech Center, in July 2016.

Monticello High School (MHS, Figure 2) is a public comprehensive high school located in Charlottesville, Virginia, within Albemarle County Public Schools. Making is integrated into many subjects across the MHS curriculum. Since 2012, MHS has promoted a school-wide portfolio system in which all students have their own portfolios and are encouraged to document their classwork, homework assignments, and other projects and works-in-progress. This case highlights how a traditional public high school invites responses to openly shared school work while working through challenges related to administrative changes. Monticello High Schools' efforts began as traditional portfolio assessment within subject-specific learning; in the subsequent years, that integration and development of school portfolio practices have broadened. One example of this is allowing for administrative policies that can be expanded by youth and educators beyond the classroom and school walls to accommodate multiple audiences and timescales.

Further exploration of how the MHS portfolio system can be used to incorporate documentation into school-based maker activities in several different courses is discussed in **Research Brief 12B**.

Maker Ed



Figure 2: The Open Studio Space at Monticello High School, in December 2015.

High Tech Elementary Chula Vista (HTeCV, Figure 3), part of the High Tech High Public Charter School network, is located about 15 miles outside of San Diego, California, in close proximity to the border of Mexico. At HTeCV, students participate in project-based learning as a way to engage in disciplinary practices that are similar to those they'll experience as adults. Throughout the school, hands-on projects created by youth are simultaneously curated carefully by adults to showcase student practices.

At High Tech Elementary Chula Vista, digital and physical documentation and sharing of student work sits alongside administrative consideration of challenges around privacy and bias, as well as the scaffolding of complex documentation practices for students. This case highlights a school-driven digital and tangible portfolio practices that balance tensions between the role of learners as individuals who gain knowledge and skills and the roles they occupy within communities in the classroom, the school, and beyond.

An in-depth look at HTeCV's portfolio experience—through the eyes of a teacher with many years of experience documenting student work in portfolios—is provided in **Research Brief 12C**.

We engaged with these three sites across more than a year-long data collection process as part of the second phase of the Open





Figure 3: Hallway with curated student projects at High Tech Elementary Chula Vista, in May 2016.

Field Site Activities

Portfolio Project. Activities included conducting field site visits that included observations, semi-structured interviews with youth and educators, and design workshops; facilitating conference calls with educators and administrators; and sharing asynchronous email communication and site-specific surveys with the three sites. Our collaboration with all three sites can be segmented into four phases: (1) first round of calls and surveys, (2) first set of field site visits, (3) second round of calls and surveys, and (4) second set of field site visits. We describe the purposes of the calls and site visits below, combining the first and second round of calls, surveys, and visits.

Calls and Surveys: Regularly-recurring calls with one or two educators and administrators at the field sites helped us to understand the scale and depth of each site's portfolio practices and to surface any challenges and tensions they experienced or anticipated. The first round of calls served to establish a common ground of ideas between our team and site personnel, and to help us think about how these could be pushed forward during our visits. We used the second round of calls, after the site visits, to check our initial understandings and suggest new or additional ideas. All calls were recorded and summarized. Between calls and before the first field site visits, we asked site personnel to respond to surveys with questions about exceptional portfolios as well as youth and educator demographics.



Field Site Visits: The goal of the field site visits (each spanning 2–3 days) was to better understand the portfolio system and practices of each field site, including challenges and unique characteristics. With the focus on assessment, we were specifically interested in learning how documentation occurred and was used. The field site visits centered around (1) semi-structured interviews with educators and administrators, which asked about documentation practices and explored assumptions about learning and assessment; (2) youth portfolio walkthroughs in which youth showed us their digital portfolios and projects in space and explained how they made their project and what they learned; and (3) observations of youth making, capturing, and sharing projects.

Upcoming Briefs

The interviews, portfolio walkthroughs, and observations informed the three cases that we present in the subsequent research briefs. These cases present the use and implementation of open portfolios in in-school and out-of-school learning environments, as well as showcase how educators productively balance the tensions between open portfolios and traditional assessment. Together, these three cases offer rich descriptions that fall into different ecologies of assessment—drop-in, institutional, and classroom—all sharing techniques and examples from which anyone interested in portfolios can learn and be inspired.

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