Explore Locally, Excel Digitally: A Participatory Learning After-school Program for Enriching Citizenship On- and Offline

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Abstract

This paper discusses the design and implementation of a participatory culture pedagogy in the context of a pilot after-school program at Los Angeles Unified School District's Robert F. Kennedy Community Schools. Ethnographic fieldnotes, instructor and student reflections, photographs, video recordings, and student work illustrate the program's culture of participatory learning, characterized by *motivation and engagement*, *creativity*, *relevance*, *co-learning*, and *ecological learning*. ELED also supported participants' acquisition of digital literacy skills, new media literacies, and social and emotional learning competencies. This experience suggests that relationship building is integral and foundational to establishing citizenship, both online and offline.

Keywords: participatory learning, digital citizenship, after-school, new media literacies, social and emotional learning

Like so many school districts across the nation, the Los Angeles Unified School District (LAUSD) aims to boost students' digital proficiency by investing in IT upgrades and expanded wireless access (LAUSD 2011). But for LAUSD and every other school district, this solution is inadequate; increasing student engagement and scaffolding twenty-first century practices is not a function of hardware alone.

The digital divide, or the unequal access to digital tools, has long been regarded as the sole hindrance to universal digital enfranchisement. But this ignores the "participation gap,"[1] or "the unequal access to the opportunities, experiences, skills, and knowledge that will prepare youth for full participation in the world of tomorrow" (Jenkins et al. 2006, 3). Media scholars Wartella, O'Keefe, and Scantlin (2000) note, "Closing the digital divide will depend less on technology and more on providing the skills and content that is most

beneficial" (8). Simply, having equipment is one thing; knowing how to leverage it is another.

There is limited opportunity during the school day for students to bridge the participation gap by engaging with the so-called most beneficial skills and content. First, there is the question of time. Due to schools' hours of operation and disciplines' curricular priorities, students have little time, if any, to "hang out," "mess around," and "geek out" (Horst, Herr-Stephenson, and Robinson 2010, 36), identified as the means by which contemporary youths increasingly socialize, explore, and grow. Second, there is the question of content. Firewalls and Internet filters commonly installed on school networks deny users' access to relevant digital destinations, such as sites for video hosting, social networking, crowdsourcing, and gaming. According to media scholar Henry Jenkins, this "strips the [Internet's] collective intelligence of [its] diversity," thereby reducing its potential and diminishing its value (Long 2008, par. 7). As a result, youths who exclusively access the Internet at school lack entryways into today's "participatory culture."

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1. The participation gap is identified by Jenkins and colleagues (2006) as one of the three challenges to twenty-first century educators, along with the "transparency problem" and "the ethics challenge."

Participatory culture is distinguished by its "relatively low barriers to artistic expression and civic engagement, strong support for creating and sharing one's creations, and some type of informal mentorship whereby what is known by the most experienced is passed along to novices" (Jenkins et al. 2006, 3). According to Reilly, Vartabedian, Felt, and Jenkins (forthcoming), executing certain practices, including the "4 C's" of Participation outlined below, produces and sustains a participatory culture:

- *Creation*: Developing original work or adding value to existing work;
- *Circulation*: Participating in knowledge exchange by disseminating products across networks;
- *Collaboration*: Joining a collective effort to foster problem-solving, knowledge-building, and/or community-expression; and
- *Connection*: Locating individuals and entities in order to affiliate formally or informally around shared interests.

Practicing the 4 C's of Participation invites and often demands application of the twelve *new media literacies* (NMLs), "a set of cultural competencies and social skills young people need" in a culture that "shifts the focus of literacy from one of individual expression to community involvement" (Jenkins et al. 2006, 4). Despite their name, NMLs are neither "new" nor exclusively about "media"; rather, they are time-honored skills that support students' critical thinking, problem-solving, and collective efficacy. Proficiency in these skills represents new media literacy, or the ability to "read and write" – that is, comprehend and create, not necessarily in print form – within a participatory culture.

Participatory culture is quintessentially active and co-realized by members' collective efforts. Similarly, NMLs are about doing; they are skills whose value lies in their application. Many youths engage in active forms of cultural participation: Of the ninety-three percent of teens who use the Internet, roughly three-quarters have created online content, thirty-eight percent have shared their creations, and twenty-one percent have remixed online content (Lenhart et al. 2010, 23). But frustratingly, when these "produsers" (Bruns 2006) enter the classroom, their freedom to dynamically create, experiment, and share is usually limited. Online and offline "affinity spaces"– loci where participation is defined by self-motivated learning around common interests rather than by grades or prescribed outcomes

(Gee 2004) – often deliver youths' most enriching educational experiences. Until formal classrooms shift to accommodate more open-ended tinkering and less close-ended memorization, then informal learning spaces will likely remain key sites for the skill- and literacy-building that is central to participatory culture.

Aims and Theoretical Framework

Our aims in this article are two-fold: first, we elucidate a theoretical framework and methodology for a pedagogy of participatory culture, one that allows schools to capitalize on how knowledge gets produced and shared by young people in informal settings; and second, we showcase the results of an after-school program shaped by this pedagogy and implemented at the Robert. F. Kennedy (RFK) Community Schools, a flagship school of the LAUSD. Such theory-based, empirically-tested, multi-voiced findings should illustrate how educators might embrace popular culture in the context of learning, and invite participatory practices into their classrooms.

Our theoretical framework, PLAY! (Participatory Learning and You!) is informed by two main features. First, following Horst, Herr-Stephenson, and Robinson (2010), PLAY! uses the concept of *ecology* to "emphasize the characteristics of an overall technical, social, cultural, and place–based system, in which the components are not decomposable or separable" (31). Students' daily practices are situated within their learning ecologies and hence are dynamically interrelated with the cultural and technological contexts in which schooling takes place. Although classroom interactions among teachers and learners are at the center of this ecology, other contexts (e.g., after-school, home, and online) also are organic parts of the ecosystem. Currently, educators make distinctions between "formal" and "informal" learning, but students' interest-driven practices can illuminate and inform what is taught in more formal contexts, and classroom content can help learners apply new knowledge to their interest-driven experiences.

Second, at the heart of PLAY! is the NML skill of *play* (Jenkins et al. 2006). During Project New Media Literacy's implementation of a year-long workshop that focused on increasing New Hampshire educators' use of the NMLs across content areas (Project New Media Literacies 2009), *play* emerged as the participants' most cherished NML skill. Play encourages risk, challenging teachers to let the classroom become a place where both they and their students feel safe to experiment

creatively and fail productively. This type of co-learning also requires teachers to embrace the NML of *collective intelligence*. In fact, participating educators realized that their classroom communities were already using many of the NML skills in activities and lessons (Project New Media Literacies 2010a), and gained a new appreciation for their relevance and importance to participatory culture, both online and offline. This research suggested five characteristics required for a participatory learning environment (hereafter referred to as the "5 CPLs"):

- heightened motivation and new forms of engagement through meaningful play and experimentation;
- an integrated learning system where connections between home, school community and world are enabled and encouraged;
- co-learning where educators and students pool their skills and knowledge and share in the tasks of teaching and learning;
- learning that feels relevant to the students' identities and interests; and
- opportunities for creating and solving problems using a variety of media, tools and practices (Project New Media Literacies 2010).

While we recognize the importance of advocating and integrating PLAY! into classroom practice, multiple reasons compelled us to place our PLAY!-inspired curriculum pilot in an after-school program. After-school programs and other informal learning environments grant substantially greater "permission" and flexibility to explore participatory practices, free from accountability to meet state standards (Vadeboncoeur 2006). Skills gained in informal spaces—whether in after-school contexts, online communities, or hanging out with parents or peers—may complement students' formal learning goals during the school day, but are rarely connected to the spaces of learning themselves.

Our prior work had applied NMLs to traditional content in order to enhance and deepen student engagement (see Jenkins et al. 2013). But with PLAY! we theorized that cultivating a *culture* of participation would allow for the practice of "hard skills" (skills related to knowledge and manipulation of tangible objects), and enable the organic growth of "soft skills" (skills related to versatile processes and practices, such as NML skills and other social, emotional, and cultural skills). According to The GoodPlay Project and Project New Media Literacies (2011), proficiency in a subset of these "soft skills" – namely, *perspective-taking,*

reflecting on one's roles and responsibilities, and *considering potential benefit and harm to communities –* also facilitates digital citizenship: "If youth engage these skills, we believe they will be more likely to behave as, and conceive of themselves as, responsible *citizens*—as opposed to simply bystanders or (at worst) abusers—of online communities" (2). Our understanding of digital citizenship follows these authors' framing; specifically, respecting the impact of one's actions *beyond the self* on the larger collective is the cornerstone of digital citizenship. Thus, our research questions were the following:

1. What is the impact of an after-school program on high school students' levels of: digital literacy skills; new media literacies (NML) skills; social and emotional learning (SEL) skills; and the ethical thinking skills inherent to digital citizenship?
2. How can an after-school program for high-school students facilitate a culture of participatory learning?
3. How do participants interact with this educational program's learning goals?

Methodology

In order to answer these questions, PLAY!, a research group based out of the University of Southern California's Annenberg School for Communication and Journalism, developed a pilot after-school program, *Explore Locally, Excel Digitally* (ELED), for high school students at RFK Community Schools. Participants would have the opportunity to consider community issues and digital practices, as well as produce individual digital portfolios illustrating their understandings of skills and practices related to digital citizenship, for which they would earn a Certificate of Excellence in Digital Citizenship. From their ELED experience, the research team hoped that participants would develop greater proficiency in: digital tool use, new media literacies (NML) skills, social and emotional learning (SEL) skills, and ethical thinking skills.

Pedagogical Framework

The research team constructed a pedagogical framework that draws from five theoretical categories: NMLs, SELs, CPLs, ethics, and mapping (see table 1).

The ELED lesson plans for each session honored at least one component from each category, ensuring that all components were explored over the course of the program. Furthermore, these concepts were printed

Table 1. PLAY! – A Theoretical Framework for Participatory Pedagogy

Theoretical Categories	Components	Source
New Media Literacies (NMLs)	Play, Performance, Multitasking, Networking, Negotiation, Simulation, Visualization, Distributed Cognition, Appropriation, Transmedia Navigation, Judgment, and Collective Intelligence	Jenkins et al. (2006)
Social and Emotional Learning skills (SELs)	Self-awareness, Self-management, Social Awareness, Relationship Skills, and Responsible Decision-making	Elias et al. (1997)
Characteristics of Participatory Learning	Motivation and Engagement, Creativity, Relevance, Co-learning, and Learning Ecosystem	Project New Media Literacies (2010a)
Ethics*	Participation, Identity, Credibility, Privacy, and Ownership and Authorship	Project New Media Literacies (2011)
Mapping	Space, Stories, Boundaries, Layers, and Creations	Project New Media Literacies (2010b)

*Note: Respecting these core themes contributes to the development of ethical thinking skills, operationalized as Perspective-taking, Reflecting on One's Roles and Responsibilities, and Considering Potential Benefit and Harm to Communities. "If youth engage these skills, we believe they will be more likely to behave as, and conceive of themselves as, responsible citizens—as opposed to simply bystanders or (at worst) abusers—of online communities" (The GoodPlay Project and Project New Media Literacies 2011, 2).

on paper rectangles color-coded by category and posted to ELED's Word Wall, or bulletin board of vocabulary. Participants were invited to examine the Word Wall and discuss their understandings of the terms, as well as reflect on which terms they recognized as relevant to the day's activities. Reflections were further shaped by ORID, a protocol for facilitating group discussions (Stanfield 2000), based on four lines of inquiry: Objective (e.g., "What happened?"); Reflective (e.g., "How did it make you feel?"); Interpretive (e.g., "What is this all about?"); and Decisional (e.g., "What is our response?"). At the end of each session, a facilitator encouraged reflection and critical thinking by asking participants at least one question from each of ORID's four categories.

In terms of process, sessions were designed to offer opportunities for self-expression, physical activity, hands-on practice, critical reflection, and sharing with the wider community (see appendix 1 for a sample lesson plan). From a pedagogical and methodological perspective, participants were regarded as "action researchers," due to their participatory role in data gathering, and the nature of action research as a public, non-hierarchical situation that quintessentially interlinks reflection and action (Altrichter et al. 2002).

Site and Facilitators

The Robert F. Kennedy Community Schools (RFK) is both a LAUSD-designated pilot school campus and a consortium of six small schools that collectively serve grades K-12. Located on twenty-four acres in the Wilshire Center/Koreatown area of central Los Angeles, on the former site of the Ambassador Hotel where US Senator Robert F. Kennedy was assassinated in 1968, RFK's students hail from Pico Union and other neighboring communities, which, taken together, comprise the most densely populated area in California. The school-age population is predominantly Latino (eighty-four percent) and low-income (eighty-nine percent), with fifty percent English Language Learners.

Situated at the center of the RFK campus is the RFKLab, a state-of-the art digital media lab, archive, and community center focused on social justice and digital media. The lab is run by an independent non-profit organization, RFK-LA (Legacy in Action), whose mission is to "give students the ability to use the digital arts for both personal expression and the exploration of larger social issues" (RFK-LA 2010, 3). Through ELED and other initiatives, PLAY! has been RFK-LA's lead academic partner in achieving this mission on the RFK campus.

In terms of instructional design, the ELED

after-school program was to be team-taught by an array of facilitators. Four members of the research team were to attend each weekly session and function as instructors, alongside a series of visiting instructors who prepared special themed sessions. These visiting instructors were the six graduate students enrolled in the Principal Investigator's COMM 578 course at the University of Southern California's Annenberg School for Communication and Journalism (Spring 2011). Their mandate was to apply theory to practice.[2] In addition to the facilitators, the sessions were also attended by research personnel (a research assistant taking ethnographic notes and a lab manager filming the sessions for research) and, at various times, affiliated staff members from PLAY! and RFK-LA.

Recruitment

In the weeks prior to the start of the program, participants were recruited through a multitude of channels. PLAY! reached out to RFK administrators; informational fliers and participant applications were distributed to teachers; and ELED was introduced to the students via in-class pitches, and by encouraging word-of-mouth transmission among peers. Interested participants filled out the program application, which posed four short-response questions. Rather than asking about participants' familiarity with discrete digital tools, the questions pertained to community and learning, thus reflecting ELED's larger goals and understandings of digital citizenship (see appendix 2).

Participants

Twenty-five students variously participated throughout the course of the semester. However, as the weeks progressed, a stable group of eight participants attended regularly. Of these, six were male and two were female; five were Hispanic, and three were Asian; and their mean age was fifteen.

Materials and Design

Since utilizing multiple modes of data collection with children yields rich, parsimonious data (Darbyshire et al. 2005), data were collected with various instruments throughout the program: surveys, ethnographic field notes, participatory evaluation, and examples of participants' work.

Two multi-paged, pre-/post-intervention surveys evaluated NML and SEL proficiency, respectively. The NML instrument had previously been tested for reliability and validated through factor analysis (Literat 2011). The SEL questions were taken from the Devereux Student Strengths Assessment (DESSA; LeBuffe, Shapiro and Naglieri 2008), an instrument comprised of eight scales and validated by Nickerson and Fishman (2009). For this project, investigators took questions from five of the DESSA's scales — self-awareness, self-management, social awareness, relationship skills, and decision-making — because those five constructs constitute the core competencies of social and emotional learning (Zins et al. 2004). Participants' responses to the NML and SEL inventories were analyzed using descriptive statistics and compared (baseline vs. endline) using paired t-tests and multivariate regression analyses in SPSS 18.

Over the first eleven weeks of the program, the research assistant (who played a participant-observer role) took ethnographic fieldnotes and completed an engagement index that captured session flow, key moments, and participants' attention across activities. This data was examined to describe participants' engagement levels throughout individual sessions, as well as to identify correlations between activity characteristics, engagement levels, and learning outcomes.

To frame proficiency levels in the areas of interest (namely, digital tool use, NML skills, SEL skills, and ethical thinking skills), investigators adapted the Global Kids Media Masters Digital Transcript (Joseph 2009) by locating along a continuum the tool's three areas of skill development and substituting "Talk about It" to "Teach It." Thus, proficiency ranged from Beginner: "Recognize it," to Intermediate: "Do it," to Advanced: "Teach It." Investigators applied this rubric after the program concluded to make better sense of participants' skill gains.

Instructors critically reflected on each session's processual and educational effectiveness via comments in internal GoogleDocs, as well as during weekly meetings with research partners. They discussed timing, the relative success of various activities according to perceived engagement levels, and impressions of participants' learning in several domains, particularly NML skills, as indicated by Word Wall sessions. Participants also reflected on the ELED program during

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2. ELED designers also hoped that, by offering access to diverse teachers and styles, opportunities to reflect upon their own learning practice, and space to share feedback, the high school students would become better equipped to inform the design of a participatory professional workshop for educators that the ELED team would unroll that summer.

a midpoint "regrouping" session. In a group forum, they shared their thoughts on what was working and what was not working, as well as offered suggestions for how to adapt. Instructors continuously applied this qualitative feedback by adjusting the program's daily structure and content foci.

The lab assistant recorded documentary and interview-style video footage, and participants also took multiple photographs and videos of the program's processes and products. These audio/visual data were not subjected to formal content analysis; rather, they were used to illustrate program activities.

The program was conceived to run over fifteen instructional weeks, from February to May 2011, on Friday afternoons. Thursdays were "Open Lab Days" for students to optionally drop in and work on their digital portfolios or explore self-directed projects under the supervision of the lab manager. Appendix 3 outlines ELED's Weekly Schedule and Learning Objectives.

Results

Our first research question examined the impact of the after-school program on high school students' levels of digital, NML, and SEL skills. Indeed, based on the traingulated research methodologies described herein, we observed an increase in these competencies for most students, in spite of the methodological challenge of adequately measuring such changes with a small student population.

In terms of digital skills gained, participants in the after-school program learned to work with a diverse toolbox of digital media hardware, software, and applications. The students demonstrated mastery of cameras, iPod Touches, PCs, and Macs, and learned how to shoot and upload photos and video footage in order to create complex multimedia projects. They also interacted with applications such as Twitter, Tumblr, VoiceThread, YouTube, CameraZoom, Stickybits, Hipstamatic, Google Maps, and Google Earth. To showcase their work, they created media-rich presentations in Prezi and a multi-layered map of their school grounds in Vuvox, augmented with the media footage that they had taken over the course of the program. It is also important to note that the students understood these digital skills in the context of their applications, and in relation to the "soft skills" that they encourage; on the final day of the program, presenting their work to an audience of family members, administrators, teachers, researchers, and peers, they reflected on their learning by discussing how technological abilities relate to habits of life.

These experiences suggest that all of our participants demonstrated Beginner proficiency in digital tool use, as they were able to "Recognize It" by adding to the list of digital tools that they knew of and catalog these tools' attributes. As participants created with these tools ("Do It"), all of them also achieved Intermediate proficiency. Some participants demonstrated Advanced status ("Teach It") when they circulated amongst their peers and helped them to annotate digital images in Vuvox, for example, or showed them a key feature on the iPod Touch.

As far as the NML skills are concerned, the students understood and reflected on their meaning throughout the program; however, due to the unsuitability of quantitative measures for small samples like ours, we are not able to determine the exact degree of acquisition by using solely quantitative assessment methods. Although we administered both NML and SEL surveys to the students, the sample was too small (n=12 at baseline and 7 at endline) to ensure satisfactory reliability, and thus the statistical analysis was not significant. We could somewhat determine, though, the degree of NML comprehension by students' end-of-day reflection. Engaging in the ORID protocol and referring to the Word Wall provided participants with opportunities to discuss their learning and identify their implementation of various NMLs. Given their choices and their rationale, it was evident to the researchers that students understood these concepts (Beginner proficiency) and were able to apply them to their own learning and development (Intermediate proficiency).

Some participants achieved a certain degree of Advanced proficiency. They shared their own definitions of NML skills through examples and reflection, which is a form of teaching their peers about alternate/additional ways of understanding NML skills. One male participant, Viraj, noted that he liked "providing your own interpretation instead of looking at them [NML defintions] in the dictionary, because you don't really learn like that." The deep-thinking, poetic Danny declaimed during one Word Wall session, "Play is imagination in reality… Creativity is imagination as a tool… Creativity is the refuge from reality."

Participants engaged most deeply with the NML skills of *play*, *performance*, *negotiation*, *visualization*, and *collective intelligence*. *Play*, "the capacity to experiment with one's surroundings as a form of problem-solving" (Jenkins et al. 2006, 4), was integral to ELED's pedagogy. Each session provided opportunities for harnessing unfamiliar tools, making

sense of diverse concepts, figuring out how to work with different constellations of peers, and determining the strengths and limitations of new instructors. Physically oriented group games were also commonly used as an "icebreaker" activity and, as a result of a mid-program discussion, more gaming was incorporated into ELED. As such, participants attained Intermediate proficiency in *play*. Viraj and Jocelyn, by leading newcomers in a How To video session, and Andy, by facilitating the Human Knot game, demonstrated some Advanced proficiency in *play*.

When it engages at least one other person, the process of play demands *negotiation*. Activities such as joint projects and group discussions provided contexts for practicing *negotiation*. Exploring borders and boundaries, considering digital footprints, and constructing norms also fostered participants' intellectual appreciation of negotiation's value and methods. This suggests that participants attained Beginner and Intermediate proficiency in *negotiation*.

Performance, defined as "the ability to adopt alternative identities for the purpose of improvisation and discovery" (Jenkins et al. 2006, 4), was used robustly in ELED. The participants' favorite and most frequently played game, Mafia, required role-play and impromptu debate. Improvisation was also utilized during Week One in order to examine issues of identity and community. Character study, complemented by some improvisation, was the principal vehicle by which participants thought through Facebook posting. This enabled participants to attain Intermediate proficiency in *performance*.

Finally, *visualization* was productively tapped across curricula. Week Seven's "MP3 Citizenship," an investigation that spanned two after-school sessions, offered abstract art and musical instruments as means for participants to visualize and express their feelings about their schools. Over the three sessions that students worked with borders and boundaries, they photographed tangible objects that indicated social barriers and constructed layered maps to visualize the presence of and relationships between divisive sites. This facilitated Intermediate proficiency in *visualization*.

The ELED after-school program also encouraged participants to reflect on and strengthen their SEL skills. Through team activities and digital projects, *self-awareness* was explored in relation to their self-efficacy and civic and social empowerment, while *social awareness* was facilitated primarily through critical and creative engagement with the concepts of boundaries, ethics, and mapping. The students exercised their *social awareness* by applying these concepts to their school, their neighborhoods, and their city; they critically examined the features of successful schools and communities, and identified areas for improvement. Demonstrating a high level of conceptual understanding, they practiced *social awareness* by identifying and reflecting on "invisible boundaries," as shown by Mark's comments about the "boundaries inside us" or the "borders we have right now in class." All of this suggests Beginner and Intermediate proficiency in *social awareness*. By teaching peers to look more critically at borders and boundaries, a few (unlikely) participants demonstrated some Advanced proficiency in *social awareness*. Ruben, whose demeanor often appeared standoffish and mischievous, revealed his intellectual sophistication when he shared a photo that he snapped of a school sign warning students against entry/exit, saying, "It's just words. But it's an emotional threat and boundary."

The participants cultivated their *relationship skills* through a predominance of group activities and a heavy emphasis on collaboration and *collective intelligence*; their feedback on the after-school program revealed that team-building activities were among their favorite aspects of the curriculum. Finally, *responsible decision-making* and *self-management* were stimulated in the context of a discussion of college education and life-planning, and also in relation to online self-presentation across popular social media and informational platforms. Two ELED participants' inappropriate behavior – Andy extending his middle finger during the Borders and Boundaries activity and Ruben photographing this gesture—demonstrated deficiency in these two skills, while the resulting group discussion provided all participants with an opportunity to "Recognize It" and begin to rehabilitate.

As previously noted, ethical thinking skills form a subset of the NML and SEL skills. The ethical thinking skill of *perspective-taking* is equivalent to the NML skill of *performance* plus the SEL skill of *social awareness*. *Reflecting on one's roles and responsibilities* is equivalent to the NML skill of *collective intelligence* plus the SEL skill of *self-awareness*. *Considering potential benefit and harm to communities* is equivalent to the NML skill of *negotiation* plus the SEL skill of *responsible decision-making*. Creating composites by collating proficiency levels in these constituent NML skills thus demonstrates participants' digital citizenship. Because participants engaged with all of these NML

and SEL skills, they demonstrated Intermediate digital citizenship.

Critical reflection was a key component of this program. ELED's daily schedule offered multiple venues for processing, from ORID to Word Wall to sharing out the day's work, which had been created either individually or in small groups. Week Eight serves as a case in point. During this "regrouping" session, when PLAY!'s two principal instructors were the sole adults present, participants critically evaluated the program and listed on the whiteboard what was and was not working. Elements that participants identified as working included "good schedule," "team-building activities," "different activities every week," "interesting topics," and "collective intelligence." In terms of what was not working, participants cited "not enough games," "not enough computers/technology time," "not enough advanced [e.g., cutting-edge] technology," "unfinished projects," "following norms," "too much talking," "not enough physical activities," and some contextual challenges, such as the booming sound of the drum corps's Friday afternoon practices and ambivalence regarding whether Thursday's optional lab session should be mandatory. Then participants brainstormed solutions to their problems, debated each solution's viability, and resolved upon an action plan that included such measures as playing more games. Participants' engagement in this activity demonstrated their capacity to productively apply SEL competencies to the tasks of learning and community maintenance.

These shifts in disposition were exemplified in ELED's culminating event. Participants voluntarily and collaboratively conceptualized, prepared, and presented a hands-on workshop for their community that featured their process, projects, and understandings of participatory culture. Like all ELED sessions, the event began with a kinesthetic icebreaker: a knot game. A participant led the attendees in this activity and asked them to reflect on how this knot game facilitated and challenged collaboration. Then the attendees split into four groups and visited, round robin-style, four stations. A pair or trio of ELED participants led each station, inviting visitors to: select skills and practices from the Word Wall that described their ELED experience thus far; learn more about the 4 C's of participatory culture via a Prezi presentation; explore the program's norms and participants' process for creating them; and make their own "how to" video (a popular activity from Week Five). Finally, the ELED participants answered questions from the audience. From the

group's first brainstorm for this event to the departure of the last guest, ELED participants utilized (and thus demonstrated Intermediate proficiency in) all five of the SEL skills, as well as NML skills, including (but not limited to) *collective intelligence*, *negotiation*, and *play*. Because they also taught about these skills, they showed Advanced proficiency therein.

For our second research question, we wanted to know how a culture of participatory learning could be facilitated within the context of an informal after-school program for high school students. Relying on ethnographic notes and instructor reflections from each session, we were able to identify several strategies that encouraged the creation and maintenance of a participatory learning environment. A major factor was participants' *ownership and authorship* of the program's relational and physical space—a pair of concepts that was also a mapping category in the curriculum. Day One began with students being invited to determine norms and guidelines that would govern their interactions. Ideas included "show respect for each other," "talk with power," "think creatively," "collaborate often," and "people before technology." These norms were reviewed and redefined at three points during the program, and vitally supported the establishment of an environment of participatory learning. The theme of owning and authoring the space continued as participants were invited to share their opinions about what sort of lab furniture should be purchased and where it should be placed. Participants' work and ideas played an important role in sensitively configuring the lab to meet their needs.

Instructors' embrace of *co-learning* was also a vital part of ELED, and likely contributed to the participatory learning culture. Especially given the fact that instructors shifted each week, they relied upon avidly listening to participants' ideas and respecting participants' cultural expertise as they implemented their activities. The week before they assumed the instructional reins, visiting instructors attended the program as participant-observers. Such a process exemplifies co-learning. In their comments, the core instructors also revealed their identification with the role of co-learners. They regularly discussed what they learned about participants' personalities and proclivities, and used on-the-ground successes and challenges to inform the shape and content of ELED's schedule.

When asked to evaluate the after-school program—in an effort to identify strengths and areas for improvement—the students' responses were

indicative of our efforts to stimulate the characteristics of participatory learning (CPLs). Several students said they liked the fact that "no one person was in charge," either indicating their appreciation of relaxed hierarchy (i.e., *co-learning*), instructor diversity (i.e., *learning ecosystem*), or both. The students also concluded that they found the topics interesting and germane, which is a reflection of our attempt to honor *relevance*. According to the daily engagement indices, attention levels were high through most of the activities, although they varied depending on the types of skills and digital resources involved.

Finally, for our third research question, we looked at how participants interacted with our learning goals—accepting, rejecting, or transforming them. Participants most strongly embraced the goal to create a participatory learning culture. By actively co-constructing the program and enthusiastically authoring projects, they facilitated the type of environment and learning outcomes we had hoped for.

Recognizing the relationships between soft skills (NML and SEL skills) and hard skills (digital tool use) seemed to be the greatest stumbling block. Although youths and adults alike identified the ubiquitous importance of soft skills, and students devised the norm "people before technology," students frequently complained about not devoting enough time to "technology" and "devices." This emerged as their principal criticism of the program.

During the last session's public showcase, participants were able to articulate the goals of the program and properly emphasize the collaborative aspect of ELED's exercises and activities. They focused almost exclusively, however, on discussing projects that involved digital technology and did not mention the more conceptual activities in which they took part.

Discussion

The goal of the ELED facilitators was to craft a culture of participatory learning by eliciting the CPLs during sessions. Translated into practice, honoring participants' *motivation and engagement* meant sensitively monitoring and explicitly querying the group, then retooling the direction of an activity or, indeed, of programmatic features, as our midpoint "regrouping session" suggested, according to the participants' interest. This also tapped *relevance*, as the issues they raised related directly to their unfolding experience, and *creativity* in their management. *Co-learning* was exemplified in the active practice of

skills like collaboration, *networking*, *negotiation*, and reflection. Honoring participants' holistic *learning ecosystems* enriched the value of this practice.

The relative flexibility of the after-school program (from both a logistical and a pedagogical perspective) also contributed to the establishment of a culture of participatory learning. A particularly illustrative moment occurred in the context of an activity called "borders and boundaries" that required the students to photograph their school; one of the pictures showed ELED participant Andy giving the middle finger to the camera. Instead of meting out punishment, the instructor chose to discuss this transgression in relation to personal boundaries and the community's self-generated norms. Initially, students laughed, claiming that the stunt was "funny." Pushed further, they admitted feeling nervous and called it "stupid." It is important to note that Andy's verbal communication skills were poor—he rarely spoke in the group and, when he did, barely audibly. Encouraged to consider Andy, the assignment, and their context, participants keenly and creatively suggested that Andy might be rebelling against an "appropriateness" boundary and queried whether, instead of just "stupid," his act was an emotional response. This relevant context for considering complex relationships appeared to empower the group to critically think and empathically connect. It also allowed Andy to reflect—without losing status—on his *self-management* and *decision-making*.

In their articulation of ELED learning outcomes with attendees of the final presentation day, participants focused on increased proficiency with digital tool use. Perhaps this represents a transformation, not a rejection—rather than, equally, or even more important than hard skills, participants might interpret soft skills as useful only insofar as they facilitate success with digital technology.

NML proficiency development occurred primarily around social skills: *collective intelligence*, *negotiation*, *play*, *performance*, and, in the context of its ELED practice, *visualization*. This might reflect the social orientation of the program, which positioned citizenship as a central concern and appropriated SEL competencies as an element of its pedagogic framework. It might also reflect the digital citizenship goal of the program, as *collective intelligence*, *negotiation*, and *performance* support ethical thinking skills that contribute to digital citizenship.

As previously stated, the after-school program was held in the RFKLab. That this was the RFK

Community Schools' first year of operation, and that ELED was the RFKLab's first program, helps to explain why the "digital haven" initially was technology-less; in fact, it did not have chairs. This gave our team both the opportunity to freely design curriculum without restricting ourselves to certain technologies, as well as the physical space to use the lab for multiple purposes (e.g., kinesthetic games, group collaboration, individual study). Participants were also invited to weigh in on the purchase and placement of furniture, which likely contributed to their sense of ownership over the physical space, and consequently the program parameters.

Our experiences with this freedom, coupled with our desire to support learning from an ecology that transcends the limitations of physical space, inspired us to purchase only mobile devices and mostly modular furniture. Thus, the digital lab remains "technology-less" and interior design-agnostic. This allows future learners to continuously redesign the lab experience, both by pushing around the wheeled tables and chairs and/or by interacting with the tools that meet their needs.

But the lab's relatively blank canvas was not necessarily free of constraints. When informal learning programs are located within formal learning structures, participants might struggle to shed expectations and habits associated with that space; in other words, the culture of school might pervade an after-school program such that participants set their default learning mode as "passive." Informal spaces' lack of grades can help to mitigate against this dynamic and, over time, *motivate* and *engage* so that productive *co-learning* is possible. Herein also lies the potential, and need, for the lines between informal and formal learning spaces to dissolve. Establishing a culture of learning that differs significantly from the norms of the conventional classroom can support students' abilities to use their skills and experiences across their *learning ecosystems*, as well as boost their self- and collective efficacy as participants in a globally connected and diverse world.

Limitations

Our research process reflected the challenge of adequately measuring learning and skill gains through quantitative methods. Although it is possible to draw evaluative conclusions using triangulated qualitative methodologies, as we have attempted to do here, such research strategies do not allow for the establishment of clear causal relationships in regards to learning outcomes, which is often an important impetus behind the implementation of informal learning programs.

While the issue of assessment in research with children and youth is problematic in general due to both logistical and ethical considerations (Morrow 2009), it becomes an even greater challenge in the case of small-scale student-centered programs like ELED. In view of such programs' participatory pedagogical approach, they will necessarily cater to a limited number of participants and, therefore, will produce smaller sample sizes. Furthermore, socio-cultural competencies like the NMLs and SELs are not as clear-cut as the more demonstrable technological skills that relate to the use of digital tools and resources. This raises vital questions about the suitability of quantitative (survey) methods in the context of media-based after-school programs at the high school level, and indicates the growing significance of employing alternative, participatory research practices in the evaluation of learning outcomes (Literat 2011).

Communicating the learning outcomes to the students, and reconciling these goals with the participants' own desires and sense of co-ownership, was also challenging. At various points throughout the workshop, participants mentioned their desire for more hands-on involvement with devices and technologies. In fact, when asked about possible reasons behind some of their peers' withdrawal from the program, some ELED participants speculated, "They expected more technologies." In view of such insights, it is crucial to address the students' expectations about technology openly and at various points throughout the program. The balance between soft skills like NMLs and SELs versus more applied hands-on digital skills is a decisive factor in the success of the program; the fact that the latter are generally more appealing to youth populations should be considered and sensitively managed in order to respect participants' interest as well as facilitate a rich, holistic learning process. This observation has implications for classroom teachers as well, who similarly struggle to balance their learning objectives with students' calls for more media-rich experiences.

An additional limitation might have been the presence of "outsiders": the lab manager, research assistant, and various observers. Their unfamiliarity, unknown agendas, watchful eyes, and recording devices, as well as their lack of consistent attendance and full participation, might have compromised the high school students' willingness to speak and act freely.

Erratic attendance certainly affected group dynamics and might have, at some points, challenged

individuals' ability to collaborate and focus. Eric had been a faithful and exuberant member of ELED and his mid-March transfer to another school was keenly felt; Zhan, a gamer with a keen wit, had attended seventy percent of the ELED sessions until he stopped coming around mid-April; and Genesis, who had sporadically attended half of the sessions, unexpectedly returned to the program in mid-May to join the core eight in preparing and presenting the final session. While attrition is common in after-school programs (Vadeboncoeur 2006), it impacts group dynamics nonetheless. This was compounded by instructors' inconsistency, determined both by design (in the case of the rotating graduate student instructors) and by circumstance (in regards to the unexpected departure of three NML researchers). These instructors' defection might have destabilized trust or reconfigured participants' connections to the program, a phenomenon that also challenges teachers and students in formal learning contexts. However, it also might have inspired participants to recommit to ELED, as the group's productivity in May far exceeded other months', and the intimacy of only eight participants and one stable instructor likely contributed to this feat.

Future Research

This investigation suggests multiple avenues for future research. What would happen if one adjusted pedagogy in order to situate instructors as facilitators (the "guide on the side" approach (Jones 2006)), or revised curriculum design in order to open even more space for hands-on discovery—the "flipped classroom" approach (Tucker 2012)? Would participants demonstrate increased engagement, better attendance, greater frequency and capacity for experimentation, and self-directed production? How, if at all, would this affect learning of technical skills or theoretical knowledge?

The characteristics and implications of participatory learning require more scholarly and applied attention, and future studies could test the applied soundness of the participatory learning model. Contributions to this emerging area could meaningfully advance pedagogical inquiry and praxis, as well as help to reconcile contemporary contradictions between the wider participatory culture and schools' internal logics. In a related vein, these studies might examine relationships between and among resistance to NML and SEL uptake and broader cultural values and prejudices (e.g., valuing independence above collaboration, preferring individual liberty over community responsibility, associating SEL skill proficiency with femininity).

Developing assessment strategies for project-based and participatory learning experiences is also critical. Offering relevant contexts for students to demonstrate their skill proficiencies could be a cornerstone for this technique.

Beyond considerations related to the impact of participatory cultures on learning and development, future research also could investigate issues of scale (Is scaling up desirable and, if so, how best can it be implemented?), coordination between in-school and after-school contexts (Is increased coordination feasible and desirable?), student incentives (What are the most suitable rewards in such contexts, and what is their role in informal education?) and, finally, appropriate assessment strategies for small-scale informal learning environments.

Conclusion

The Explore Locally, Excel Digitally (ELED) after-school program demonstrates the impact of a participatory learning culture characterized by *motivation and engagement*, *creativity*, *relevance*, *co-learning*, and *ecological learning* (Project New Media Literacies 2010a). It also suggests that digital citizenship, like its offline counterpart, is grounded in and constituted by social and emotional competence and community awareness. Rather than focusing solely on the "digital divide" aspect of twenty-first century participation, our policymakers, administrators, and teachers would serve youths better by addressing the "participation gap" (Jenkins et al. 2006, 3). Providing avenues for the practice of cultural competencies and social skills facilitates young people's rich exploration, meaningful discovery, and innovative contribution to their communities both today and tomorrow.

Appendix 1: Sample ELED Lesson Plan

Each lesson plan in the Explore Locally, Excel Digitally (ELED) curriculum utilized a carefully planned permutation of the five theoretical categories illustrated in Table 1.

For instance, Day Three of the ELED curriculum investigated:

- NML: Distributed cognition, negotiation;
- SEL: Social awareness, relationship skills;
- CPL: Learning eco-system, relevance;
- Ethics: Ownership;
- Mapping: Boundaries, space.

These terms, color-coded by category, were posted on ELED's Word Wall. Participants were invited to examine the Word Wall and discuss both their understandings of the terms and which terms they recognized as relevant to the day's activities.

In terms of process, sessions were designed to offer opportunities for self-expression, physical activity, hands-on practice, critical reflection, and circulation of products/progress/ideas out to the wider community. Applied encounters, rather than explicit inculcation, were the intended vehicles for discovery and growth.

Appendix 2: ELED Application Short Response Questions

Please tell us about yourself by answering the following questions. Please PRINT or type your answers on a separate sheet and attach it.

1. What specifically attracted you to this after-school program and what do you hope to get out of it? (The more you can tell us the better.)

2. You will be collaborating with a diverse group of students in a creative and collaborative community. Please tell us what "community" means to you.

3. What else about you, your ideas, and your outside interests do you feel would contribute to this program?

4. Tell us something new or different you wish your teachers would do.

Appendix 3: ELED Curriculum

Instructional Plan	Lesson Title	Learning Objectives
PLAY! instructors introduce mapping and ethical practices in participatory spaces.	"Identity, Participation, and Performance"	● Recognize the importance of creating norms and guidelines to facilitate responsible community membership ● Use improvisation as a tool for perspective-taking and exploring group dynamics ● Explore the characteristics of collaboration, anonymity and remix in creative and ethical practice
	"Borders and Boundaries"	● Evaluate the functions and ramifications of borders and boundaries ● Document and present evidence of borders and boundaries at RFK Community Schools, then consider possible actions to address them
Graduate students from COMM 378 teach workshops that explore the New Media Literacies in depth	"Visualizing RFK's Layers, Borders, and Boundaries"	● Use MobileMe and Vuvox to share images, layer, and annotate on a digital map various photographic representations of borders and boundaries at RFK Community Schools ● Appreciate individuals' interpretations and the group's overriding themes
	"Hipsta History"	● Photograph the Ambassador Hotel site with the Hipstamatic app on the iPod Touch and compare these images with historic photos found on the Web ● Take the perspective of and empathize with those who inhabited this space in the past
	"'How To' Videos"	● Empower students by introducing them to the possibility to learn to do things they want to do or need to do, using online 'how to' guides ● Promote students' own confidence in their abilities, and their willingness to help others, by creating their own share-able 'how to' video
	"Facing Facebook"	● Understand that their online identity can be open to interpretation ● Think critically about the personal information they disclose online about themselves and others
	"MP3 Citizenship"	● Use Microsoft Paint to create an abstract score for an anthem exemplifying students' understanding of their schools ● Alternately act as conductor and band member, leading fellow participants through one's own score and using unfamiliar instruments (e.g., electric guitars, percussion) to aurally realize anthems
	Regrouping Session	● Review norms, reflect on what is and what is not working ● Goal plan for the remainder of the program
	"This Is My Los Angeles"	● Forge a meaningful and personal connection between mapping, community, and identity construction ● Engage in a reflective discussion of comfort spaces, identifying the differences and similarities between their own perceptions and those of their peers
	"Re-make the Grade"	● Look more deeply at grading as a practice ● Encounter other forms of evaluating, photograph and grade the school environment, and reflect on the experience

Appendix 3
(continued)

Instructional Plan	Lesson Title	Learning Objective
PLAY! regroups with participants and supports them in curating digital portfolios comprised of projects they completed throughout the program.	Project-based Learning	● Prepare for final event
	Project-based Learning	● Prepare for final event
	Project-based Learning	● Prepare for final event
	Project-based Learning	● Prepare for final event
	"Come PLAY!: ELED Participants Teach the Community"	● Introduce administrators, teachers, families, and friends to ELED terminology, themes, projects, rules and norms, and hands-on practice ● Allow participants to demonstrate their expertise and share their knowledge and skills with community members by leading discussions, giving presentations, and facilitating activities

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