A CULTURE OF SHARING
A Look at Identity Development Through the Creation and Presentation of Digital Media Projects

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Abstract: We share two longitudinal case studies of thirteen-year-old students who were part of a design intervention focusing on media production and technological fluency, tracking how project production and presentation developed students' sense of themselves and their reputation within the community. Practices supporting positive academic and creative identity development are highlighted.

1 INTRODUCTION

We believe that there is a need for theory that specifies practices to support not only the development of interest in learning (Hidi & Renninger, 2006) but positive academic and creative identities, as well. In this paper we look at youth production and presentation within a technology and media rich school environment and how opportunities and affordances within the environment influenced student identity development. Our specific research questions include: (1) How does presentation and sharing of work support students' identity development as they take on meaningful roles in production, access domain knowledge, share and receive community attention? (2) What practices within the environment support the development of different positive identities, including that of new media creator?

Recent theoretical perspectives on identity development seek to move beyond static and singular conceptions of identity, typically cast in terms of demographic variables such as gender, age and ethnicity. Penuel & Wertsch (1995) argue that identity formation involves an encounter between cultural resources for identity and individual choices with respect to particular commitments. Gee (2000) distinguishes nature identity, institutional identity, discourse identity, and affinity identity and argues that identity can shift across contexts or time. Nasir & Saxe (2003) provide an analytical approach that helps us understand how the social environment positions students as particular types of community members.

Developing, presenting and sharing technology projects and experiences within a collaborative community of people with similar interests/ideas is recognized as one way for youth to develop a sense of their own identity, role, and position within the new media culture. In his 2006 position paper, Henry Jenkins addresses the importance of sharing as part of a digital community, maintaining that the new definition of technological fluency involves youth taking part at various levels in continuous and widening cultures of technology and media creation and involvement. Examples of this type of participatory culture range from simply being a part of an online community, to producing new media projects, to collaboratively developing and sharing new media, goals, and messages. Other researchers have noted the potential of participation in these types of environments as a way for youth to develop a sense of their role within the community. Peppler and Kafai (2007) documented youth who participated in a Community Technology Centre gaining new understandings of what it means to be a designer, including choice of appropriate tools,

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finding resources, critiquing their own work and that of others, getting feedback, and revising.

In our analysis, we build on these theoretical and methodological insights in the service of advancing our understanding of how a school-based technology learning environment supports identity formation as authors, designers, and creative new media artists and critics.

1.1 Context and Methods

Data collection takes place at Renaissance Academy, a middle school serving approximately140 students grades sixth through eighth (i.e., ages 11 to 14 years) in a large, urban area in the Midwest region of the United States. The school has a partnership with the Digital Youth Network (DYN), an organization intended to develop students' "new media literacy," (Pinkard et al., 2008). Opportunities for presentation are considered important and are built into the program. The DYN programmatic structure contains formal and informal learning spaces, including: (1) mandatory weekly media arts classes offered during the school day; (2) eight weekly after school clubs called "pods," including digital design, digital music, digital radio, digital video, digital queendom (a girl's only space), spoken word, video game design, and robotics; (3) weekly after school forums; (4) *Remix World*, an online social networking site that complements face-to-face participation by creating additional spaces for project development, presentation, and critique; and (5) unstructured time to use the program's production tools. While all students attended yearlong media arts classes, the other DYN components were voluntary. Approximately 50 students regularly attended at least one after school pod each week.

Data collection occurred during two academic school years, 2006-07 and 2007-08. We are in the final year of a three-year study documenting the learning and development of nine focal case students within DYN who began sixth grade in the fall of 2006. We use both interview and field note data to create portraits of learning about technology across time and setting in a genre that has been called technobiography in recent work (Henwood, Kennedy, & Miller, 2001).

1.1.1 Interviews

Interviews with students at multiple time periods and adult teachers and DYN coordinators were recorded and transcribed.

Learning Ecologies Interview. A semi-structured interview protocol was developed to obtain detail on how computers were used at home, school, with peers, on-line, and through community based contexts. There were three main sections of the interview: (1) How students used and learn about technologies in the contexts of home, school, friend's houses, and community locations; (2) how students see themselves in relation to new technologies; and (3) interests and future plans. Each interview was conducted by one interviewer with one student in a private room and was recorded with both a digital audio recorder and a video camera when possible. Interviews varied in length from 30 minutes to over an hour. All case learners were interviewed in December of their sixth grade year.

Artefact-based Interview. This semi-structured interview was designed to provide a focused look at the projects students are working on and obtain an account from the learner's perspective of how they learned, how the projects came to occur (pathway), and the opportunities for fluency building within different projects. Questions primarily focused on their stories of creation and learning. Two researchers interviewed each student in a private room at school with student work displayed on their laptops. Interviews lasted approximately one hour and were video-recorded with the camera focused on the screen and keyboard to capture the visual referent of the interviewee. All case learners were interviewed at the end of sixth and seventh grade.

Teacher and DYN Coordinator Interviews. During an offsite professional development workshop, eight teachers and coordinators participated in three 15-30 minute semi-structured interviews about a case learner. Prompts were designed to elicit adult perceptions of the cases as learners, producers/creators, collaborators, and members of the DYN community. All interviews were audio-recorded.

1.1.2 Field Notes

Three researchers observed more than 195 hours of the 45-minute classes and 2-hour after school sessions. Researchers focused on: (1) instructional delivery, (2) opportunities for production and presentation, and (3) adult and youth interactions around instruction and creation. While in the field, researchers prompted participants to explain decision-making related to teaching and production. We recorded events as descriptive "episodes" in effort to maintain the real-time sequencing of events (Emerson, Fretz & Shaw, 1995). Lastly, researchers collected audio and video recordings as well as

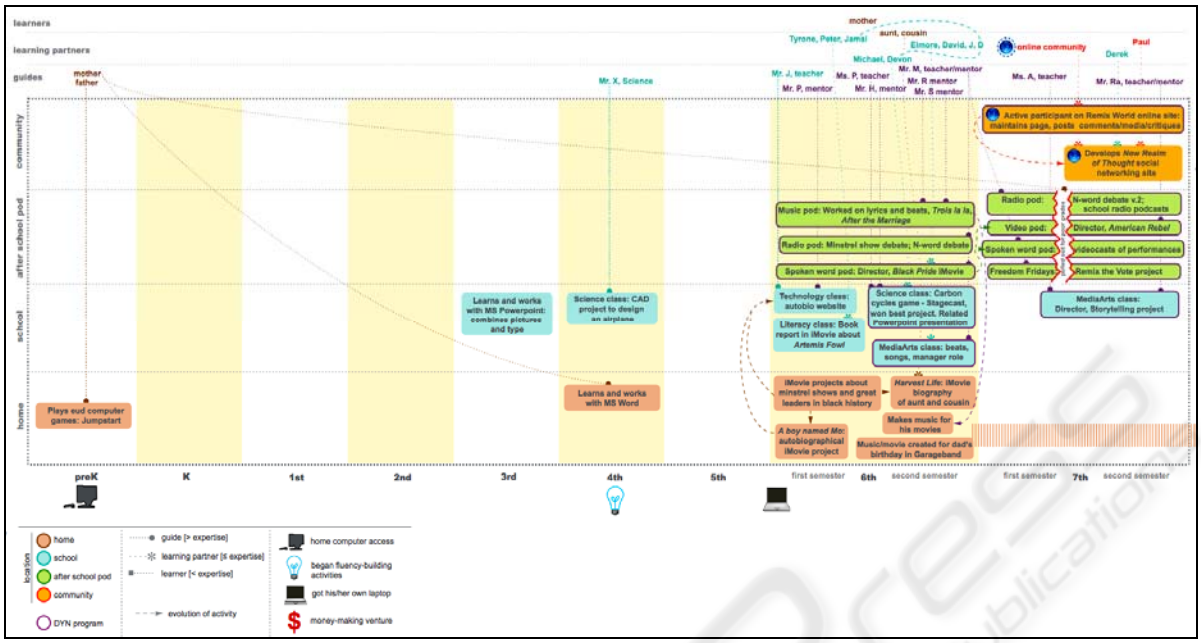

Figure 1: Technobiographical timeline representation for Maurice, with key.

artefacts. Researchers conducted line-by-line coding (Emerson, Fretz and Shaw, 1995) of these notes using broad categories. The third author reviewed the application of these codes in order to refine the schema. Using this revised coding plan, the notes were re-examined and coded as event segments whereby changes in group membership, instructional format, locations, discontinuity of time, and instructional topics of materials formed the frame for applying codes (Stodolosky 1988). The researchers used the output from this coding to identify patterns in student identity develop within the learning context.

2 RESULTS

In the DYN classes and pods, coordinators used a project-based approach to encourage the acquisition of digital literacy skills. Project work often involved students taking on specific design and production roles. In DYN during-school classes, students were sometimes assigned roles or were allowed to choose from a list of responsibilities needed to complete the assigned project work. This format supports student identity development within a set of defined new media production roles. The more informal DYN spaces, including the after school pods and the *remix world* online social networking site, provided opportunities for students to independently pursue their own projects and come up with new and innovative roles for themselves. Across classes, pods, and online spaces, the public sphere of presentation motivates creation but also fosters identity emergence and saliency via the acts of invitation, performance and discussion, and the recognition through competition and evaluation.

Below we share two cases that highlight identity development within the context of project creation and presentation in DYN. More generally we look at how this environment and certain practices within it contribute to or detract from the positioning of students as creative media producers.

2.1 The Social Change Activist

Maurice was an outspoken student in the DYN community who used his digital media expertise to share messages and ideas, which frequently involved African American history and pride. He participated in the radio and music pods in sixth grade and the video and radio pods in seventh grade. His timeline reflects his growing technology skill set and project portfolio (see figure 1). By the end of seventh grade Maurice had developed at least six substantial video projects, five music projects, three radio packages (podcasts), and an online social networking website titled *wechange*. Maurice saw himself as a unique individual who was capable with technology and by the end of seventh grade most of the DYN community seemed to agree. DYN coordinators referred to him as “innovative” and “creative” and

his peers often looked to him for help. His project work and visibility were instrumental in his personal identity development and the formation of his reputation within the larger community.

2.1.1 Visibility of Self in Project Production

One way that Maurice shaped his identity as a producer and creator was to clearly document his roles. His video work often included a credits section listing his contributions, such as "Video director" and "Visuals director." He consistently used a radio DJ name for his podcasts in the radio pod. The "About me" section of his *wechange* social networking site profile read simply, "I am the Creator of this network." When asked about the roles he played in the site development, he responded:

> *"I saw myself a lot of different ways as an inventor and as a student activist…I was making my dreams, my observations and what I talked about more then just a dream and observation when I talked about. I took action and I actually put it, put what I was thinking about into motion …Well, before I created this website I was student activist and it's always been my dream especially for the future to be a student, a social activist. And so I saw when I made this website…it was a way of social activism to get people to stand up to what they believed in to talk about it, to discuss it, and to come together."*

Another manifestation of his visibility within projects that has helped Maurice to develop a recognizable identity within the DYN community is his use of representations of himself in his work. In his video project entitled *Black Pride*, one fifth of the movie is footage of Maurice's face as he reads a poem. On his *wechange* social networking site, he embedded a promotional video featuring himself in multiple roles, that of the "nerd" who uses a popular social networking site and that of the "cool guy" who uses Maurice's site. When the radio pod assignment was to create a movie about an "American Rebel," Maurice chose himself and included his story, his voice, and photos of himself throughout the video.

> *"So I started the school recess movement and I guess that would have made me an American rebel because I was actually, I was standing against the laws at my school and I decided that I wanted to change something."*

2.1.2 Visibility of Project Work

Maurice was also very successful getting his work viewed by a relatively large audience within the DYN community; he frequently showcased his work through formal and informal live performances in class, pods and online spaces. Online, he utilized both the DYN *remix world* site and his own *wechange* site. On *remix world*, he began and/or contributed to 54 discussions. Some of his posts are political musings, others are related to cultural events or styles, and still others are his own written work, including poems. He posted his *Black Pride* video project on his profile page and was a member of four groups. On *wechange*, he started seven discussions and posted two of his own video projects, *Black Pride* on his profile page and the promotional video for the *wechange* site in the "about us" section. His online participation in both Web spaces allowed Maurice to show his work, receive feedback on it, and comment on and critique the discussion posts and work of others in the community. He also cross-referenced his profile and project visibility, potentially widening the audiences for his work: On *remix world* his screen name is the title of his own social networking site, "wechange", and there are links from each site profile page to the other.

2.1.3 Adult Positioning of Student and Work

A final important factor contributing to the visibility of Maurice's project work and the development of his own identity along with community recognition of this identity was the frequent positive positioning of his role and his work by DYN coordinators. Maurice was sometimes considered "too academic" or a "know-it-all" by his peers but the DYN coordinators purposefully worked to change this perception, encouraging students to see Maurice as someone who could help them.

> *"I think the kids see [Maurice] as socially awkward…I think he's able to balance that with some students, but other students are like, 'Maurice is saying something smart again…' For me as a mentor when I see those situations happening it's like, 'No, let him speak because you can learn from him.'"*

DYN coordinators helped to validate Maurice's role as a media creator by becoming members of his *wechange* site. They posted his project work on *remix world*, including three interviews Maurice conducted with adults (a teacher from the school, a game designer, and a community centre program leader) as part of the radio pod. They also replied to

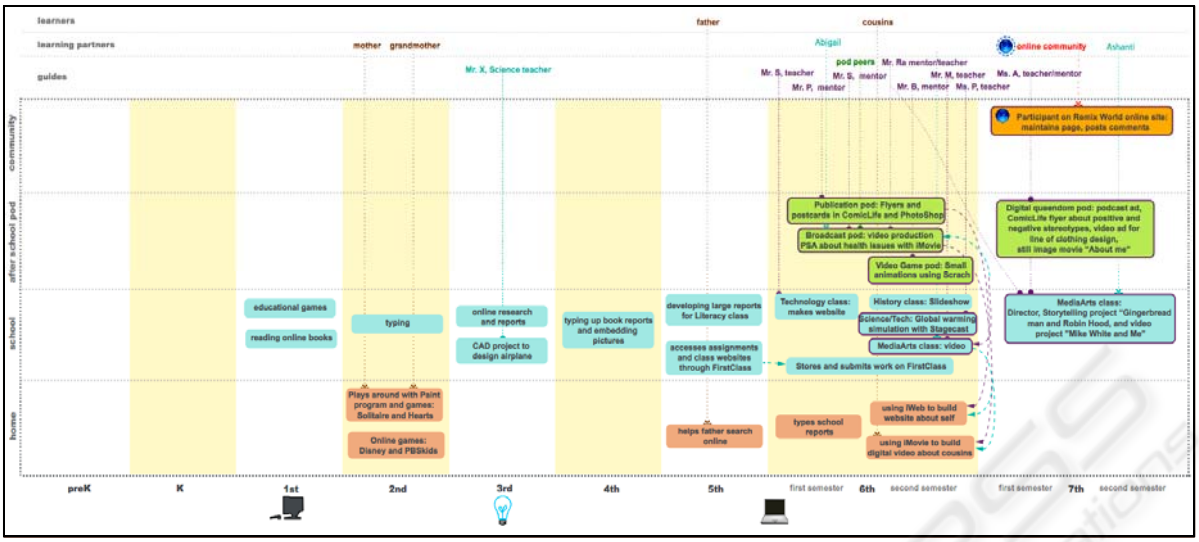

Figure 2: Technobiographical timeline representation for Renee.

his online discussions, commented on his projects, and provided links to his work. A comment from a DYN coordinator about one of Maurice's video interviews read:

> *"Very specific and focused questions that prompted substantive answers from [the interviewee]! Mistakes we see in a lot of our interviews are student's asking very short vague questions, which end up getting short vague answers unfortunately. You've set a good standard for everyone to keep up between this and the [game designer interview] piece!"*

With the help of DYN coordinators and his own inclinations toward project production and presentation, Maurice's public role as an engaged expert within the community resulted in new opportunities for learning. Two DYN coordinators used Maurice in classes and the after school pods as an informal assistant both for technical and media literacy topics. He was also asked to be part of a student design team to plan elements of a new building to house their school. These new opportunities have the potential to strengthen his own identity as an expert and expand the recognition of him as an expert to a wider community.

2.2 The Personal Explorer

Renee began middle school without much computer experience beyond basic word processing but participated in a range of in school and after school technology learning opportunities through DYN (see figure 2). During sixth grade, she participated in the video pod, the design pod, and the video game pod, while in seventh grade she participated in the design pod and the digital queendom pod. In sixth grade, though Renee had produced and edited a 10-minute movie about her cousins independently on her own time, and created a multi-page Web site about her work, her design interests and talents were not recognized within the wider DYN community. Coordinators spoke of her consistent participation and ability to complete her projects but described her as "very quiet" and an "average" student. By the end of her second year in the program Renee's identification as a designer evolved and her work was more visible and widely recognized through her participation in *remix world*, the online DYN social networking site.

2.2.1 Hesitancy to Label Self in Defined Role

Though Renee created a number of projects across a range of media including computer games, digital videos, page layout designs, and Web sites, she was hesitant to label herself as an expert and often did not clearly identify her own role in production. Though her collaborative projects, such as a video commercial for a line of clothing, sometimes featured her in an acting role, there are no credits to identify the roles she played in the development of the project artefact. When asked about roles she played in collaborative project work, she was vague about her particular responsibilities or used "we" instead of "I" to describe her learning and creating in DYN programs.

When talking about her knowledge and her own work she sometimes included a disclaimer. "I'm the

person for teaching people how to use it…If they don't know how to use something, I do – probably." Despite having a fully designed profile page on *remix world*, with an artistic background image, 28 posts about a range of topics, membership to three groups, her own video work, and background music, she warns the interviewer about its incompleteness.

> *"I actually don't have that much made, but I post like discussions and reply to a lot of things."*

2.2.2 Selective about Shared Work

Renee was not driven to share her technology project work with a wide audience, and her projects were often left unpublished. DYN coordinators had little knowledge of projects she pursued outside of formal assignments. Though she regularly presented in classes and pods when it was part of the particular assignment, she was hesitant to show her work to outside audiences. One coordinator recounts:

> *"When I pulled [Renee] for the presentation for the lady that was coming around and looking from outside the school, she told me that she was uncomfortable in talking about what she was doing. And I kind of joked with her like, 'You like to do all the work but you don't want anyone to see you?' And she was like, 'Yeah, I really don't want to talk about it all.'"*

When Renee chose her own themes, her projects are often reflections on and explorations of her own identity, including a still-image movie with voice over entitled "Princess" about her likes and dislikes. Her content about herself and her family may have been less given to wide distribution than projects with messages specifically designed for the public, like many of those by Maurice.

> *"Like well I didn't post when I did my cousins' film. I didn't post it on remix world because I don't know, but I just didn't post it for a lot of people to see."*

2.2.3 Development of New Roles

Despite her disinclination to present work broadly or position herself in the community in terms of her technological project work and skill set, Renee began to find her own way of participating and defined new roles in the community for herself. When she collaborated with a peer who did not participate in the after school technology pods, Renee took on the role of "teacher." Within this experience, she was able to see herself as someone with more expert knowledge:

> *"Well she like found the music, found the special effects. She edited some of it, but I did most of it because I knew how to do it better…Well like I was under – well, I just know how to do it. So I just taught her. She helped out. I know somebody has to teach her to learn"*

At the end of seventh grade, Renee formed a design production group with a peer in the design pod. This labelled and named group was a step toward branding her work and gaining recognition, perhaps without having to draw attention to herself as an individual.

> *"But this is for design class and we have a company. So me and my partner, we chose this because we thought it was unique like a Twilight Zone has a lot of things that you want to see. So like we're going to be making like CD albums, posters, and stuff light that…Like [Twilight Zone] is just the name, like people they will remember us. Okay, they're unique they do stuff that's crazy, good."*

2.2.4 Use of Online Spaces for Presentation

In seventh grade Renee used *remix world* to show carefully selected pieces and thoughts within the community, valuing the feedback for her continued revisions and production work.

> *"I like people to see it and critique like how I – like critique the things like what needs to be done to it. What can I change?...because it helps like to make it better. It helps me to make the best I do better."*

Renee's discussions, posts, and video work prompted encouraging responses from the program coordinators. For her poem post she received comments from two DYN coordinators, both complimenting her work and suggesting ideas for further innovations: "i love your poem. i would like to see the other ways you can make this look (like a comic life or short imovie)." One discussion she began about what to do about violence in schools prompted three DYN coordinators to reply in ways that highlighted Renee's unique position in the community, including:

> *"Speaking of trendsetter...How many girls is making beats like that. You need to slide some of that over to the spoken word or video for soundtracks. This year was just a start. Can't wait to see how you continue to grow your skills."*

The digital queendom pod coordinator posted a video by a collaborative group including Renee, an advertisement for a line of clothing. Given Renee's

disinclination to "show off" in person, the online space may have offered both Renee and the coordinators a more comfortable way to publicly showcase her skills and her work.

Though the DYN community may not have immediately recognized Renee's entire technology story, she was growing as a media artist, taking on roles of producer, videographer, and designer both with her independent and group work. Renee took advantage of the opportunities offered through DYN, and found a way to pursue her own topics and explore some new roles as a media designer.

3 DISCUSSION

The promise of project development, from concept to presentation, is clear. From the case learner stories, we find that artefact production can: (1) build reputations of students as particular kinds of participants in the eyes of the community; and (2) lead to a sense of self as an author, artist, inventor, creator, or teacher.

These points are impacted by the degree to which students are participating in the larger community and sharing their work. Students at Renaissance Academy who chose not to participate in the voluntary aspects of DYN were less likely to evidence identity growth and development as a new media creator. Though both case students in this paper developed their skills through formal classes and pods and followed their own interests to learn more by playing around with tools and creating their own interest-driven projects, the degree to which they shared their new knowledge and were recognized for their accomplishments differed. Renee's initial preference for creating personal rather than public projects highlights the importance of attending to engagement in learning across settings of home, school, and other informal community spaces (Barron, 2006). Though her personal projects were less visible to mentors and peers, they were important learning opportunities that provided grounding for her later more public efforts.

Our findings highlight a number of practices within the DYN environment that impacted participation, sharing of work, and positive identity development, including (1) providing multiple opportunities and spaces for showcasing work, (2) identifying and labelling clear roles in project production, (3) encouraging the development of new roles and practices within the community, and (4) explicitly positioning student contributions as valuable.

We believe that the intentional design of learning environments that attend to identity development may be productive and more generative than curriculum alone. The practices identified here may be informative for those interested in designing such environments to ensure that despite individual tendencies or dispositions, all students have opportunities for participation and growth. Additionally, although our research effort was situated in a technology and new media program, these practices are not intrinsically linked to the subject itself. Instead, we believe that they can be adapted for use in many different kinds of project-based learning environments.

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