

## Participant Understandings of the Affordances of Remix World

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**Abstract**

Remix World was designed as an online media education learning environment that bridges multiple contexts of informal and formal learning. On Remix World students and mentors have the opportunity to engage in critical dialogue in an online community context (Buckingham 2007) and to construct knowledge through the production of artifacts that are linked to social practices and social identities. A more in-depth analysis of these new media artifacts, which include video, blogs, discussion threads, photos, and personal profile pages, will provide further insight into the meaning-making opportunities, knowledge building (Scardamalia and Bereiter 2003), and knowledge-sharing interactions of this space and the literacy practices that students engage in as members of Remix World. More research is needed to explore issues of equity and the availability of learning opportunities for all youth within learner, community-centered, and new media environments (Alvermann et al. 1999; Buckingham 2007).



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## Goals and Purpose

This study seeks to understand and begin to map out the learning and literacy practices on Remix World, a social networking, new media, learning environment. This online, interactive site is integrated into an in school/after school media arts program called the [Digital Youth Network](#) (DYN). Interactive, virtual spaces and tools such as social networking sites provide many opportunities for individuals to express identities and make connections across geographical, cultural, and generational boundaries (boyd and Ellison 2007; Merchant 2007; boyd 2008). These shifting boundaries create opportunities, within online spaces, for increasingly dynamic individual and group experiences. Because the online social network extends beyond the bounds of physical space and time, we draw on an ecological framing as a way to begin to understand and characterize how these virtual spaces can be leveraged as learning environments that teach media education while bridging both the in- and out-of-school lives of individual learners.

In this study, we examine interactions within Remix World (see fig. 1) and seek to understand (1) the nature of literacy and learning in this space, (2) the ways that multiple contexts are bridged through interaction with the environment, and (3) how Remix World provides learning opportunities for students to use and practice multiliteracies (New London Group 1996). We also hope to contribute to the creation of a conceptual and methodological framework for further studies into the nature of literacy and learning within learning environments similar to Remix World.

The design of this study is based on a theoretical understanding of Remix World as an online, inquiry-based, participatory learning environment where the site—and the knowledge that is constructed

(Scardamalia and Bereiter 2003) through interactions within the space—is transformed (Barab et al. 2000). In earlier research on Remix World we found that as members interact within the online space, the space becomes transformed through the artifacts that are created by the participants and the participants are in turn transformed through their interactions with these artifacts (Zywica, Richards, and Gomez, forthcoming). To understand learning within spaces such as Remix World, where the environment and individuals influence one another, we must take into account the interactions between the learning environment and the participants. Therefore, the viewpoint and perceptions of the participant must be considered equally with the features of the environment itself as having an impact on learning and literacy practices (Gibson 1986).

In this study, we document and describe the affordances (Norman 1990, 2010)<sup>1</sup> of Remix World as perceived and articulated by the participants within this online space. *Affordances* refers to the features or qualities of the environment. Documenting and describing the affordances of Remix World is a necessary step in understanding this space and how it is used and transformed. To get at its affordances, we documented and analyzed the artifacts produced in support of and during the use of Remix World (including documents created by the original designers and administrators to make the site usable, as well as documents created by participants as they used the site) and considered participants' opportunities to learn using Remix World.

We also examined the extent to which this space bridges multiple contexts where students and mentors engage in multiliteracies (New London Group 1996). To engage in multiliteracies is to use multiple modes of representation to express and recognize goals and intentions within a social-cultural context; it is also the ability to identify the meaning-making opportunities within the space. The use of multiliteracies to engage in transactions, communicate ideas, and explore thinking and meaning is a natural extension of our use of increasingly sophisticated and available tools for interaction. Literacy is an adaptive skill that draws on and responds to sociocognitive contexts (Flower 1994). Online spaces such as Remix World have structural affordances that provide those who draw on them with opportunities for representations of claims and intentions that are more expansive, multidimensional, multiliterate. Multiliteracies



Figure 1 A screen shot of Remix World.

represent a response both to increasing opportunities and to the demands that increase in response to such opportunities. Perceived affordances and multiliteracies are used to communicate goals and intentions and are thus necessary for meaning-making within new media environments such as Remix World. The structures within such spaces are sufficiently ubiquitous and ill defined in comparison to traditional text-based literacies that users must draw on features and available resources (New London Group 1996) for meaning-making. Multiliterate adaptations occur as users interact with diverse tools and in changing environments in order to access and make meaning with multiple modes of representation. Users may also need to be able to recognize the structural affordances of the space to make meaning.

We identified three participants' perceived affordances of Remix World—those of Tania, a sixth-grade student; Marcus, a mentor/curriculum designer and Remix World co-conceptual designer; and Adam, program assistant director of DYN and Remix World co-designer and mentor. Students in Remix World participate alongside mentors at any time of the day and in multiple contexts, thus blurring notions of in- and out-of-school literacies and domains. In exploring the affordances of Remix World, we hoped to understand where the students', designers', and mentors' perceived affordances overlap and diverge in order to gain deeper insights into how these learning environments and larger literacy systems can be leveraged within educational contexts. We were particularly interested in how spaces such as Remix World might be used to create intentional learning opportunities for all members within a learning community.

One way to understand interactions within a site is to examine participant perceptions of the purpose and function of the site, to consider how these perceptions influence the intentions and goals that drive interactions within the site, and finally to locate artifacts that impact participant perceptions of and practices within the site. Knowledge of the perceptual affordances of a space and the artifacts that participants produce there can lead to understanding of the social practices, identities, and communities that emerge within such spaces.

This exploratory research study examines the following questions: What affordances do Remix World's lead designer, a mentor on the site, and one student participant perceive? How do perceived affordances of the site influence participation on the site? What

is the relationship between perceptual affordances, participation, and the artifacts that site participants create? What does this relationship reveal about how participants understand multiliteracies because of their interactions within these new media spaces?

### The Remix World Context

Remix World, an online media education environment, was designed by and integrated into DYN, an in-school and after school digital arts curriculum in Chicago. Three Chicago-area charter public schools have implemented the curriculum. The middle school where the present study was conducted implemented the DYN program in 2006. The aim of the program is to teach middle and high school students new media literacies that involve the ability to critique and produce digital media (Pinkard, Sweet, and Gray 2009). All students in the school were given their own laptop computer after a mandatory introductory regimen to ensure their understanding of how to care for the laptop. Students chose to participate in DYN's after school clubs or "pods" (e.g., video game design, broadcasting, digital music). All students on Remix World were also participants in DYN's in-school and/or after school classes.

Remix World was created through Ning, an online system for designing custom social networks (Ning 2010).<sup>2</sup> Remix World (and other networks on Ning) visually resembles sites like MySpace and Facebook. Students join Remix World and set up a profile that is also similar to what one might find on these popular social networks. This similarity affords increased access to the learning environment because students are already familiar with the structures and formats of the site (Zywica, Richards, and Gomez, forthcoming). Similar to MySpace and Facebook, Remix World enables students to display reproductions of media, artifacts, and designs as well as original work. Students can connect with users within the DYN network who have similar interests and can view media posted by peers and critique peers' work (Pinkard et al. 2008).

However, unlike Facebook and MySpace, Remix World is a closed, informal, online environment open only to students, DYN instructional mentors, and other community members who have been given access to the site by the Remix World webmaster and designer. At the time of our study, February 2008, the site had 222 members, including about

10 mentors, 30–40 other community members, and approximately 170 students. Mentors are full-time staff members who lead, teach, and develop the media arts classes and curriculum for the in-school and after school DYN program. Community members include researchers<sup>3</sup> and selected media professionals from around the world who bring expertise to the site. Active members of the Remix World site are affiliated with the DYN program either through the media arts class that meets during the school day or through involvement with the after school classes or pods. The site designer and administrator approve all members on Remix World. Teachers and parents are not allowed on the site because it is intended to be a student-driven space.<sup>4</sup>

#### Literacy as a Lens across the Ecology

Remix World, like other interactive, online spaces, connects a variety of environments and gives users the tools to link multiple contexts (Davies and Merchant 2007; Merchant 2007; boyd 2008). Understanding the meaning-making potentials and notions of literacy within environments like Remix World requires a deeper understanding of the interplay between context and learning (Miller 1998; Verhoeven 1998; Nixon 2003; Gee 2004; Barton 2007; Jewitt 2008). The literacy practices on Remix World connect the individual to the environment and to larger systems where the participant both shapes and is shaped by the environment (Barton 2007). An ecological understanding of learning and literacy therefore must take into account the multiple overlapping variables that impact both the learner and the context within which he or she is situated.

Educational researchers have used the ecological metaphor to examine negative learning attitudes, bullying, teacher professional knowledge, parental involvement, absenteeism, special education, and school policy (Spencer, Dupree, and Hartman 1997; Weaver-Hightower 2008). In an online learning environment like Remix World, studying literacy practices within the specific contexts of home or school is difficult because this space overlaps many contexts. The ecological framework provides a lens through which to examine the interaction and relationships between these overlapping contexts. An ecological understanding of literacy and learning seeks to examine the interdependent and changing relationships between individual learning and multiple social contexts.

Empirical studies on learning ecologies have demonstrated that learning is dynamic and spans multiple contexts that are interdependent and influence individual development (Barron 2004; Barron, Martin, and Roberts 2007).

Understanding literacy practices as interdependent and having the ability to adapt to changing places and tools is an expansion of sociocultural and critical perspectives on literacy practices as being socially and culturally situated (Barton and Hamilton 1998; Gee 2004). Barton employs the ecological metaphor when he asserts that all literacy practices need to be understood in terms of systems: “Instead of studying the separate skills which underlie reading and writing, [an ecological approach] involves a shift to studying literacy, as a set of social practices associated with particular symbol systems and their related technologies . . . to be literate is to be active; it is to be confident within these practices (Barton 2007, p. 32). However, Barton’s ecological framework centers on print media and writing.

The situation within new media environments is slightly different, and literacy there can be further understood by adopting the new literacies perspective (Leu et al. 2004), which synthesizes various conceptual elements related to literacy within new media and digital technologies. The new literacies perspective emphasizes the dynamic and shifting nature of situations that place a greater demand on the ability to adapt. The ability to adapt to changing situations requires the ability to think critically and draw on “repertoires of practices” that are related to multicultural discourses, norms, and genres (New London Group 1996; Gutiérrez and Rogoff 2003). Theories about learning with new media and literacy within new media learning environments continue to emphasize the importance of being able to use “literacy toolkits” that include issues such as identity, culture, community, and critical thinking (Leu et al. 2004).

In order to understand how individuals adapt their literacy practices, an ecological approach situates literacy as interdependent and dynamic. Therefore, one approach to understanding literacy practices is to analyze (1) the interactions between individual perceptions of the environment, (2) the artifacts that are created by an individual within the environment, and (3) the larger social and cultural context in which both the individual and environment are embedded. To this end, one must consider both the affordances

that are available in the environment and those that participants perceive.

#### Remix World and Perceived Affordances

The ecological concept of affordances was first developed by Gibson (1986), who incorporated more than 50 years of experimental research on individual perception. Gibson wanted to link the perceptions of the individual to objects in the environment as a way to understand how individuals make meaning out of their environment. For Gibson, an object can have different affordances depending on how the individual perceives the object. These affordances can vary depending on the individual's goals and perceptions. Norman (1990, 2010) has noted that instead of appropriating the term *affordances* and attaching it to the term *design* he should have coined the term *perceived affordances* because in design "what the designer cares about is whether the user perceives that some action is possible, or in the case of perceived non-affordances, not possible" (Norman 2010, n.p.). While the designer may perceive the particular affordances of a tool, in Norman's view the user's perceptions are central in locating its affordances because the user may not perceive all of them. For example, the user might perceive that a knife can be used to cut an apple. But a knife has many other affordances: It can be used to unscrew or pry open; it can be thrown at a target; it can even be tapped on a table to keep time to music. That the user does not recognize these additional affordances is not necessarily a limitation of the tool or of the user. Yet, how the tool is used may say something about the nature of the tool and the intentions of the user.

In this study, we use *affordances* to refer to the design features that create a relationship with the user through their presence, seen or unseen. The concept of affordances helps us to identify and connect interactions between the individual and the environment. But, like Norman (1990, 2010), our use of the phrases "perceived affordances" and "perceptions of affordances" reflects the centrality in our analysis of consideration of the user's interaction with the online environment and its features.

Researchers have considered and applied this conceptual understanding of affordances across contexts, users, and uses. They have considered the purpose, function, and goals of the user and designer and of the artifacts generated by using tools within the

space. For example, guided conceptually by the work of Gibson (1986) and Geertz (1973), Graves (2007) probed *his* perceived affordances of online newspaper blogging with respect to the function and purpose of blogging as a new media communications tool. He analyzed news stories within the blogosphere and located affordances that characterize how users (authors and audience) interact with newspaper blogs, including how they select texts and multimedia sources for critical analysis and discussion. In Graves's blogosphere, tools (i.e., features such as the ability to upload video, post, or directly comment) and spaces (i.e., the site itself, as well as its features) can provide an affordance for knowledge building or critique, depending on their design. Because the users Graves studied had access to newspaper blogs' archives, they could, if they wished, thoroughly research earlier blog postings about a topic and thus develop the knowledge needed to respond critically to contemporary postings about the same or closely related topics. Similarly, Remix World users may learn to make sense of an issue that has emerged in the space by using other participants' representations and postings as a foil for critique.

The intentions and goals of curriculum design and learning can also influence the perception of affordances. For example, Barab and Roth (2006) have applied the notion of affordances to the creation of pedagogical practices related to new media learning environments. In these contexts, educators following specific curricular goals and intentions aim to "at-tune" students to the affordances of an online learning environment. The curricular goals and intentions influence which affordances participants perceive within the space, thus influencing learning opportunities for individual participants. Examining the underlying intentions, functions, and prior knowledge that individuals bring to Remix World is another way to begin to map out participant affordances of this environment.

Finally, researchers have used affordances to analyze meaning-making and transformative communication within digital video artifacts (Hull and Nelson 2005). Kress (2003) suggests that different modes of communicating information (in the broadest sense of the term) have different organizing logics; for example, text may require a sequential or temporal organization (Nelson 2006), whereas visual representation might leverage spatial organization. The various modes then allow certain affordances to be leveraged

for meaning-making. As such, affordances enable one to “reference the fit between a semiotic resource, with its inherent properties of organization, and the meaning-making purpose at hand” (Hull and Nelson 2005, p. 232). That is, a mode of communication can have various affordances, including, but not limited to, communication and meaning-making potential. Because the forum space on Remix World includes both text and video that has been embedded into the discussion threads, we need to examine how affordances can be used to analyze the artifacts that participants create within the space.

By focusing on affordances, we gain a lens through which to analyze the literacy practices and learning opportunities that are available within spaces such as Remix World. Identifying the participants’ perceived affordances enables researchers to consider perceptions of the purpose, function, goals, and artifacts that influence the interactions within the site and the multiliteracy practices that occur there.

With this in mind, the research questions we posed for this study are:

- What affordances do Remix World’s lead designer, a mentor on the site, and one student participant perceive?
- How do perceived affordances of the site influence participation on the site?
- What is the relationship among the perceptual affordances, participation, and the artifacts that site participants create?
- What does this relationship reveal about how participants understand multiliteracies because of interactions within these new media spaces?

## Methods

The primary research site for this study was the DYN program in the Renaissance Academy Charter School, where faculty, staff, and administrators have created a rich, design-oriented, school-based program that serves lower- and middle-income 6th to 12th-grade students in Chicago. The study described in this article is part of a larger three-year ethnographic and mixed-methods study (Barron et al., forthcoming) of Renaissance Academy school day and after school program. The goal of the larger research study is to better understand learning processes and outcomes that arise from extended work with digital media projects. The primary research question for the larger study is, “Under what conditions do new media

design projects lead to a diversification and enrichment of students’ learning ecologies across school, home, and community settings?” The aim of the larger study is to contribute to theories of learning and to advance our understanding of how to design informal learning programs that sustain learning and motivation.

The authors of the present study were researchers in the DYN ethnographic study at Renaissance Academy. The first author was a participant observer of the mentor and his student within the DYN in-school media arts class. The second author directed the ethnographic research at DYN and the analysis of the ethnographic data. We met with four other colleagues on a monthly basis to analyze the weekly collection of field reports and to create analytic memoranda identifying themes and patterns in the data related to the overarching study questions and to the specific questions of the current study. During these meetings we also participated in group coding and data analysis. The larger ethnographic study informed the conceptual and methodological framework of the current study.

The purpose of the current study is to begin to map out, from an ecological perspective, the intended affordance networks within the space. With our preliminary research we sought to understand how the intentional goals and functions of the site’s affordance networks compare with those of one student who was an active participant within the DYN program and the Remix World forum space. To understand and construct the affordance networks and recognize the prior knowledge that participants draw upon during individual-environment transactions, the intentional goals and functions of the agents involved need to be clearly articulated.

To understand empirically the notion of affordance documentation and analysis, we designed a case study of Remix World as a way to outline and identify the affordances that participants on Remix World access. We regularly monitored the Remix World site and observed DYN activities and meetings. Several guidelines and assumptions informed our approach to documenting the interactions we observed. First, guided by Bronfenbrenner’s (1976) claim that the very presence of a researcher disrupts or changes the ecological systems at play, we decided not to function as *active* participants on the site. Thus, although we enrolled as users, we did not communicate on Remix World with the mentors or student users.

We observed and documented posts and the interactions around them but strove to have minimal communicative impact on the interactions themselves (Marvin 1995).

Second, we assumed that the participants on the site were more knowledgeable about the site's function and use than we were—in large part because we did not take an active role and explore through action the perceived affordances of the site. Our understanding of the affordances was derived from observation. Further, because the researcher is not objective and outside the system, we emphasized the importance of subjects “defin[ing] their own situation” (Bronfenbrenner 1976) as a way to address researcher bias.

#### Participant Sample

Study participants were selected because of their role within the DYN program and their activity on Remix World. Preliminary observations of the site indicated that some DYN members were more active than others were. In order to identify the perceived affordances of the various stakeholders within Remix World, we selected three participants for our sample: Tania (a student), Marcus (a mentor), and Adam (the site designer).

Tania, an 11-year-old African American female student in the middle school and DYN program, participated in the in-school media arts class. Tania was chosen for the case study because she (1) was an active user of Remix World, (2) drew on the affordances of the Remix World environment to discuss various media topics that originated both in the classroom and outside the classroom, and (3) showed evidence of the use of multiliteracies in her postings.

Both adults, Marcus and Adam, held several positions in the DYN program and were also key participants in the creation and continued refinement of Remix World. They saw the DYN world and their role in it from the several vantage points afforded by their multiple design, mentoring, and teaching positions. Positioning theory (Davies and Harre 1990) suggests that one's sense of self is fluid, a dynamic self that is actively constructed. In our observation, Marcus and Adam dynamically moved within and across their vantage points, seemingly in response to what they or others in the DYN program perceived as necessary to support the design of the program, the use of Remix World, and the support of students.

Marcus, a 30-year-old African American male, had several roles in the program. He taught the sixth-grade media arts classes for two trimesters. Tania was a student in his class. Marcus also taught spoken word in the high school satellite school. In the after school pods, Marcus taught the digital radio class. He was also the director of the middle school branch of the DYN program, coconceptual designer of the Remix World site, and one of the curriculum designers for the entire DYN program. Because he taught the case study student *and* worked with the designer, Marcus had a unique perspective on Remix World. We chose Marcus for this study because he provided us with an opportunity to investigate whether and how he perceived the affordances within the space. Marcus's multiple roles (mentor, designer, and teacher) are discussed in more detail in Barron et al. (forthcoming).

Adam, a 27-year-old African American male, was the assistant director of the DYN program at all three school sites. Adam taught the eighth-grade media arts class for one trimester. He was also the Remix World programmer, administrator, and co-conceptual designer. By including Adam in the study, we gained a sense of his dynamic experiences in DYN and the interwoven backgrounds he brought to bear on the design and iteration of Remix World.

Our data collection methods were designed to look for and help us gain a deep understanding of the patterns of each participant's intentional goals and of the functions of Remix World and the forum space. Data collection for the current study took place during year two of the three-year ethnographic study. We collected data from both the in-school and after school components of the DYN program. The ethnographic study involved thick descriptive documentation using field notes; an informal, one-question survey about how participants use Remix World; and three artifact-based, semistructured interviews.

#### Ethnographic Field Notes

We adopted an ethnographic approach because we believed it would lead to a richer and more nuanced understanding of the many contexts in which the DYN site operates (Emerson, Fretz, and Shaw 1995). In August 2007, the first author developed a personal profile page on the site. She created a profile in order to enter the DYN community and build trust and rapport with community members both online and offline. However, she was careful only to observe,

never participating in discussions on the site. In addition to our observations of the site, we collected four months of field notes documenting the case study student and mentor in the in-school media arts class. Finally, we observed the mentor’s participation in a full school year’s worth of professional development and staff meetings within the DYN program.

Artifact-Based, Semistructured Interviews

In order to develop a deeper and more accurate understanding of Remix World, we created an artifact-based, semistructured interview protocol as a way to document participant perceptions of the site and to identify the threads and contexts that they felt were successful and unsuccessful. The interviews included the use of a laptop computer so that participants could guide the researcher through Remix World and directly cite specific artifacts about which they wished to talk. The interview protocol was designed to help us understand participant perceptions of the following specific aspects of Remix World:

*Use, function, and purpose:* the intentions and goals of the site and forum space

*Transference:* participants’ social ecologies and prior knowledge and how these might have influenced the affordances of Remix World

*Artifacts:* specific site threads or discussions to which participants successfully or unsuccessfully connected their goals and functions

Online Survey

As part of the ethnographic study, another member of the research team posted a single-question survey on the Remix World site in March 2008. The survey item presented respondents with a list of activities and asked, “In the last month, have you used Remix World to do any of the activities listed below?” The query was designed to help us understand how and why participants use Remix World and which portions of the site they use. Though the response rate was low (2.52% of Remix World participants responded), the results (see table 1) offer insight into why some students use the site and suggest the multiplicity of purposes that students have for using Remix World. Though the results of this limited query did not inform our interview protocol or the coding schema we developed to analyze the interviews, the information was compared with findings from the

Table 1. Remix World survey items

Activity	No of Students (n = 10)
Create my profile	3
Chat and send messages to my friends	4
Share my favorite songs and videos	6
Meet new people	2
Share photos	5
Share my media (e.g. music videos, games, etc.) that I created	4
Look at other students [sic] media that they have created	5
Reply or post a response to another student’s work	5
Critique another student’s work	4
Get feedback for my work	4
Submit homework or pod assignments	5
Post journal entries	3
Discuss important issues (e.g. the Jenna 6, women in hip hop, etc.)	5
Discuss personal issues (e.g. problems with my parents, boyfriend/girlfriend, school, etc.)	3

The survey question was, “In the last month, have you used Remix World to do any of the activities listed below?” The highlighted activities are associated with the forum space within Remix World.

interviews as a way to frame the larger context in which the intentions of the three participants of this study were situated (Zywica, Richards, and Gomez, forthcoming).

Analysis

We developed a coding schema for the report data, the interview data, and selected discussion threads based on the conceptual understandings of affordances as they relate to goals, intentions, function, purpose, prior knowledge, contexts, audience, modes of communication, and notions of successful and unsuccessful artifacts.

The interviews, including interviewer questions and responses, were transcribed. We then applied a deductive thematic analysis to the data. The interview protocol, which was based on the conceptual framework, informed the following nine categories articulated by the researchers and was the basis for our organization of the interview data:

1. participant role and identity on the site
2. structure (design of the environment)

3. participation (how the site is expected to be used)
4. communication (audience)
5. context (setting: classroom, home)
6. learning (changes in perception, knowledge, and skills)
7. resources (materials)
8. motivation (why participation occurs)
9. artifact production (i.e., discussion in class-based projects)

To aid analysis, information from these categories, or themes, was organized into a systems flow chart for each participant.<sup>5</sup> The systems flow chart was created as an analytic representational device (Lynch and Woolgar 1988) so that we could derive a macrolevel perspective on how the various categories related to one another. Although we employed a deductive thematic analysis in the first phase of the analysis, in the next stage we employed a constant comparative approach to the systems flow charts to provide a microlevel perspective on the themes and interactions across the three participants in order to understand how the intentions and goals relevant to each context were related. Our approach to constant comparative analysis involved “simultaneous comparison of all social incidents observed” (Goetz and LeCompte 1981, p. 58), as well as iterative comparison as we refined our understanding of the themes. During the second read-through of the transcripts, we identified “etic categories” (theory-related categories) and “emic categories” (participant-labeled categories). Subthemes within these categories included the facts, concepts, tools, methods, practices, commitments, and people that are tied to and/or called upon in order to achieve intentional goals and functions (Barab and Roth 2006). The overall analytic approach provided a visual representation in the form of a systems flow chart that allowed us to map the social, cultural, and political influences weighing on each participant; examine the roles these influences played within the system; and identify interactions within and across the social settings or ecologies that influenced individual interactions on the site.

In the third phase of analysis we organized the subthemes into a table so that we could compare and contrast them within and across the three participants. The aim of this stage of the analysis was to identify areas of convergence and divergence between the three participants. The subthemes were identified within the coded, transcribed interview data in the form of keywords, phrases, and statements that were organized

around emergent themes and placed within a matrix of categories developed by Barab and Roth (2006):

- *Intentions and goals*: overlapping or divergent  
*Overlapping* refers to similar intentions and goals when participants accessed the space and takes into account how these intentions and goals led to perceived actions within the space. For example, all three participants believed that encouraging multiple points of view around a topic was positive for the community, and this led to the creation of inquiry-based posts and feedback within the site.  
*Divergent* indicates that participants held differing intentions and goals when accessing the space. For example, although all three participants may have shared a similar belief in multiple points of view, each perceived a public identity that influenced how and what was included in his or her interactions within the space.
- *Affordance networks*: defined by the participants with respect to what was accessed and gained when in the forum space
- *Prior knowledge*: knowledge that was activated when participants interacted with the site. Prior knowledge helps to further articulate the intentions, goals, and affordance networks (including where they converge and diverge) perceived by participants.

A content analysis was conducted on the artifacts cited by the participants during the interviews. These artifacts were then compared with the interview data to check for consistency between the interview response and artifact content.

Finally, we conducted two member checks. The first was conducted after the data were analyzed in the first stage. Each participant was shown their systems flow chart and how their responses had been organized into particular categories. The second member check was conducted at the end of the analysis. A draft of the full study was sent to the two adult participants and was followed by one-on-one, face-to-face interviews in which participant and researcher reviewed the study and made revisions informed by the participant’s responses.

## Findings

Remix World was created to align with DYN’s after school and daytime school programs. Data collected

during classroom observations indicate that the DYN program designers and the Remix World designers intended for all DYN mentors to use Remix World as an extension of their classes or after school pods. To this end, mentors integrate the website into their classes by asking students to post projects, journal entries, or questions on the site. Each pod has a specific group space on Remix World. Mentors are also encouraged to model how Remix World should be used by posting original work, critiquing others' work, and contributing to discussions. At the time the data were collected for this study, Remix World did not have a student assessment function. Student participants on Remix World did not receive grades based on their Remix World participation. Rather, Remix World was used as a resource, supporting the DYN classes and pods, as well as students outside of the school context (Pinkard et al. 2008).

Remix World has an incentive structure to encourage students' use of the site. One incentive is "Remix dollars," which the site administrators have instructed mentors to distribute to students who participate on the site. Remix dollars were introduced as a tool mentors could use to provide positive reinforcement for posts. By distributing Remix dollars, the mentors are able to communicate and model exemplary interactions on the site. The case study student, Tania, was, as of April 2008, the second highest earner of Remix dollars among participants on the site. A second incentive involves using the site to highlight valued genres. An email sent from the Remix World designer to the DYN mentors introduced a new category for the forum space titled "original creative writing."

#### Affordances of Remix World

Gibson, citing Wittgenstein, makes clear that "[affordances] have only family resemblances. . . . But this does not mean you cannot learn how to use things and perceive their uses. . . . You do not have to classify and label things in order to perceive what they afford" (1986, p. 134). The results reported here are based on participants' perceptions of the characteristics of Remix World, especially the characteristics of Remix World artifacts (i.e., posts made within Remix World). Though we have named the affordances for coding purposes, the naming is not meant to imply that the affordances are fixed categories that could be generalized to other contexts. We sought to

identify the perceived affordances, understand the interactions between individuals and learning environments, and consider how these practices within online and offline contexts might further understandings of literacy practices within new media. What do the perceived affordances tell us about the learning opportunities available within online social networking spaces like Remix World and other spaces that provide opportunities to learn multiliteracies within a new media environment?

#### *Affordance: Remix World Bridges In- and Out-of-School Contexts and Provides Opportunities for "True Dialogue"*

One discussion thread on Remix World, "Me and Terrell's Argument" (fig. 2),<sup>6</sup> was identified by all three participants as an example of a successful post and discussion thread. Tania started the discussion on January 31, 2008. Five additional participants contributed, and the thread was completed on February 9, 2008. The discussion was conducted in the forum space but began in an out-of-school context, as a conversation between Tania and her brother, Terrell, a former student and current peer-mentor in the DYN program. The discussion was tagged by a member of Remix World with the keywords "analysis" and "first" and categorized as a "general" discussion. We do not know who (i.e., which user) tagged the discussion in this way.

Tania initiated the discussion with a prompt that framed the context:

A couple of days ago Terrell [Tania's brother] and I had an argument. I thought it was an appropriate topic to put on Remix World. It was about the Boondocks [a cartoon on television]. Terrell said that The Boondocks makes black people who are gangsters and thugs stop what they are doing. But I disagreed. I said that having people go on TV and mock what people do and have those people who do it watch it isn't going to make them change. I made an analogy to support my belief. So what if I had a stereotype that all 15 year old boys didn't like school and then 15 year old boys on TV were mocked saying they didn't like school that would only fuel and strengthen my belief. What do you think?

In this post, Tania first communicates her position and builds a prompt. A seventh-grade student replied



**Figure 2** Screenshots of the “Me and Terrell’s Argument” discussion on Remix World.

by contributing concepts related to satire, humor, and irony that she had learned within one of her core curriculum classes. The mentor, Marcus, entered the discussion with a two-sentence post and a streamlined video of an interview with the creator of *The Boondocks*. Terrell replied to Marcus’s post by thanking him for supporting his position that the show, *The Boondocks*, can change people. Marcus added a post addressing Terrell’s comment but problematizing the discussion by including a video clip from the movie *Bamboozled* (Lee 2000). Terrell replied to the mentor’s

second post to note that he had seen the movie, and on February 5, 2008, Marcus replied by commenting on the value of the entire discussion: “I must say this is a new age. . . . Wow, I wish me and my brothers and sisters could have battled like this.” A fourth student then entered the discussion and added to the mentor’s second post. The discussion ended when a fifth student commented on the entire debate and positioned herself, and her views, within the discussion, noting that she could see both sides of the argument.

The discussion thread illustrates the multiple overlapping contexts and resources that participants drew upon to keep the discussion going:

- *DYN Program*—Participants included a mentor, four students from the program, and a DYN peer mentor and former student who was also the brother of one of the students in the program.
- *School*—One student participant included literary terms from her English class in her post.
- *Family*—The discussion was prompted by an occurrence in the home of a brother and sister.
- *Media*—A television show was the original object of discussion, and an interview with its creator and comparative movie clips were elements of posts in the discussion

Both the mentor and designer discussed the importance of framing discussions as a way to contextualize and ground the conversation. “Me and Terrell’s Argument” achieved this by using popular culture and by framing the boundaries of the argument. Tania’s prompt cites popular culture references that members in the DYN community would understand. Our field notes indicate that *The Boondocks* was mentioned in at least two offline classroom events within the DYN program at which Marcus and Tania were both present. In an interview, Marcus contrasted the prompt used in the “Me and Terrell’s Argument” discussion with one used unsuccessfully on the site. The unsuccessful prompt also used a popular culture reference that the students would know, but it failed to frame the argument or the boundaries of the discussion. Marcus explained that “[the prompt was] what has Soulja Boy done for our people? When I saw the tag, I was like, what does it mean, what does it matter?”

In his one-on-one interview, the designer, Adam, also contrasted the successful prompt with

a discussion prompt that had been plagiarized from another website (the student who used the prompt failed to cite its source). Both Marcus and Adam characterized the “Me and Terrell’s Argument” thread as a success because of how well the discussion was framed within the context of DYN (Guzdial and Turns 2000).

Tania, in her interview, was not able to cite an unsuccessful post, but she described how her viewpoint had changed and been challenged by various events that she experienced after the “Me and Terrell’s Argument” post had been created. For example, one of the student participants was assigned to sit next to Tania in the cafeteria during lunchtime. Tania recalled conversing with the student, in the cafeteria, about the discussion. At home, Tania spoke with her grandfather about the discussion topic, and her grandfather talked at length about minstrel shows. He specifically recalled for her cartoons from his childhood that he remembered as negatively portraying African Americans. These interactions led to the creation on February 5, 2008, of the “Minstrel Shows” post, which Tania cited as her most “impactful” post (fig. 3).

*Affordance: Opportunity to Construct and Communicate Meaning Using Multiple Modalities of Communication*

Remix World offered opportunities for mentor and peer feedback using multiple modalities of communication (Edelson, Pea, and Gomez 1996) that, seen through the lens of a new media literacy perspective, resemble what Lankshear and Knobel have called “post-typographic literacies” (Lankshear and Knobel 2003). Writing in this sense can include many forms of communication—for example, visual, auditory, and traditional text-based modes. Consistent with notions that writing online is not the same as writing offline, the production of texts within the Remix World space included the use of video, alphabetic texts, and photo images (Merchant 2007).

Tania’s experiences following the “Me and Terrell’s Argument” (fig. 2) discussion inspired her to create a second thread, titled “Minstrel Shows” (fig. 3). Tania indicated that she discussed the issues raised in the first post with her brother (Terrell) and with peers. The discussion with her grandfather about minstrel shows prompted Tania to locate resource materials online, including video clips of minstrel shows. The final product contained an essay that she structured as



Figure 3 The “Minstrel Shows” post on Remix World.

an argumentative paper; it framed her argument and offered evidence in support of her claims. At the end of her post, she included three archived video clips of minstrel shows to support the evidence presented in her essay. Tania selected the clips for their content and imagery.

Each video has a specific meaning. This video is an example of a minstrel show. I found it on YouTube. . . . This one was a video—I don’t know who made it, but it supported my argument because it was like the first part of the

video. [It shows] how they are able to portray them. It sends an important message. It says think of how others portray you. . . . [The] last video, this was a video and an important video because this impacts the kids. . . . [Kids] don't even know what they are looking at and laughing, but the kids don't realize. They are not old enough to know what the cartoon is trying to say. [The image] is having an impact on them.

In creating this “most impactful” post, Tania synthesized previous discussions from the site as well as offline discussions. During her interview, Tania described going to YouTube and researching clips that might be appropriate for her argument. The resultant “Minstrel Shows” post used traditional rhetorical writing structures infused with new media forms. In addition, Tania used copy/paste literacies when she posted the three video clips as evidence in support of her language-based essay (boyd 2008).

Many participants contributed to the “Minstrel Shows” thread, and the design of Remix World allowed them to communicate their messages using numerous text and video modalities. By using the discussion space provided by Remix World, participants could explore different modes of communication, which in turn helped them construct meaning and fuel the discussion.

Remix World was designed to allow the posting of video clips. The mentor and Tania both identified this affordance in their interviews. They also both viewed the use of this affordance in postings as an indication of a participant's greater investment in a topic. Tania stated, “I go to post a discussion and I go to discussions—it might be two sentences, become a paragraph—and if I am really into it I will look for videos that relate to it and add those videos.” Marcus, the mentor, also shared this practice: “If I am putting links in there then I am rushing but if there is video there, then I have taken the time to go find the right clip.” The use of video clips alerted Tania to specific posts. Video clips seemed to push the discussion deeper and indicated to her that other participants were interested in the topic. When describing a thread about the Ku Klux Klan, Tania noted the use of video by Marcus, and she had memorized the text he had attached to the video clip.

That one: Marcus actually responded to that, and he even put a video response to that—pretty long—he was talking about how . . . [Tania looks directly at my eyes and not at the screen] He said

that the KKK want all the power and they can't have all that and that is why they are tearing other races down, so they can have all the power.

*INT:* How did this response from Marcus affect you when you read this? What does this mean to you?

It gave me a whole different idea of racism. I didn't think racism was when people wanted power, and so they . . . racism was about getting power. I didn't think like that. I look at [it] from a whole different thing that they wanted power. It didn't make me think that it was right; it made me think that in a different way than what I was originally thinking.—*Tania*

#### *Affordance: Development of Public Identities within a Community Context*

The influence of perceived public identity and role within the community shaped the perceived affordances on Remix World. All three participants perceived Remix World as a community space in which to cultivate public identities and cultural norms and practices. However, the things within Remix World to which participants were attuned were influenced by the public identities and roles they perceived within the community space.

Marcus and Adam emphasized the importance of bringing in primary or “key” sources and encouraged participants to cultivate roles as critical media consumers and producers (Pinkard et al. 2008) on the site. Both men emphasized how Remix World created a new media learning environment for students to experience and negotiate norms and practices associated with creating artifacts within a community context that included professional experts and novices (Ito et al. 2009). Marcus said,

The students can get critiques from their mentors . . . if a student puts something on or has a wonderful idea or a poem, it's a great platform space for me to give them encouragement since a lot of students don't want to share in class or they have their work on their computer and then they go to Remix World and go, “Oh, you did that?” . . . [Students] could put [their] work out there and get some feedback or something professional.

Adam, in both his design of Remix World and his interactions with participants there, sought to

help participants use the online space to cultivate practices and skills—including skills associated with providing evidence to support one’s arguments—that could be transferred to in- *and* out-of-school contexts. Adam’s initial observations of the interactions on Remix World between the summer of 2007 and the spring of 2008 influenced his goals and subsequent decisions regarding the redesign of the site and the introduction of incentive structures. Such structures—for example, Remix dollars—were created during the first redesign cycle as a way to encourage specific practices on Remix World and to cultivate responsible digital citizenship and scholarship within the space. Adam’s intentions and interactions are evidence that his goals were focused on citing and framing sources and building positions or arguments.

For what the [re]design would look like, and the fram[ing of] media, [this] grew out of interactions [on the site]. . . . I may do a video or I may post. . . . Something in the system [should] ask [the student] if she wrote this or not and [prompt the student] to have a link to credit the source—that should take place in all the media and interactions that they do: . . . uploading [an image], et cetera, should [earn them] credit. . . . Leverage the description area when uploading a video: “This is my project, where I did it, who supported me, [which] tools [I used].” . . . [Before the redesign] that didn’t happen; they just put a video up (and a name, at best)—[There was no] ownership of media and crediting [of] sources.

Like Adam, Marcus emphasized the importance of bringing in primary or “key” sources. But in his interview and in his postings he seemed to imply that another important goal was cultivating media artists within a community context.

These *public* identities were intentionally cultivated and developed by providing feedback to students online and within the offline classroom spaces in the DYN program. Because Remix World provided a space outside of school and outside of after school time structures, the mentors and students could interact and engage with the space at various times throughout the day. This flexibility gave mentors the opportunity to track student participation and provide feedback for students in the media arts classes and after school program. Further, these interactions enabled the designer

to monitor and reassess the goals and intentions of Remix World as a student participation-based learning environment and educational tool (Edelson, Pea, and Gomez 1996).

Tania also appeared to have a public identity. Within the DYN community, she framed herself as a scholar or intellectual. Her identity-related goals and intentions involved asserting herself as a “smart” student and one who participated within the DYN community. Her primary topics of concern on the site included issues of race, media, and identity. Her perspective and postings were primarily situated around the media and her personal experiences. In her interview, she indicated that the interactions on the site gave her an opportunity to see an issue from different perspectives. In Tania’s experience of Remix World, one affordance of the space was that the opportunity to post and read other postings could allow different points of view to emerge and could stimulate more discussion on- and offline (Scardamalia and Bereiter 2006).

Tania, and possibly other participants, discussed topics from Remix World with peers during lunchtime and with family members at home. Social issues were not an uncommon topic of conversation in Tania’s family, which regularly engaged her in discussion of social issues. In her interview, Tania observed that her family seemed to value her point of view. Remix World provided another venue, an online space, to support and extend Tania’s public identity as smart and informed about social issues. In keeping with this confidence in her public identity, Tania placed her postings on the site as prompts for other Remix World participants to add their points of view and extend the discussion. Her family’s practice of discussion and social debate became a source of continued discussion with others on the Web.

In addition, Tania noted in her interview that she felt confident in her ability to make positive contributions to the space. She indicated a sense of ownership and value within the larger DYN community, and she was constantly negotiating and challenging her social identity within the forum space: “I go to the forum space and I see if there are any discussions. Even though I like to write forums, I know that I want people to respond to mine so I try to respond to other people’s forums that are interesting.” Tania was attuned to the cultural practices that Marcus and Adam had intended for the site. Her interview comments and

interactions with Remix World suggest she understood that the reciprocal nature of interacting in an online forum applied not only to her own work but to her peers' work.

*Affordance: Cultivating Participatory Practices by Creating Opportunities for Student-Driven Spaces*

Our observation of Remix World suggests that it, unlike the interactional learning spaces encountered in school, offers opportunities for student-driven interaction. All three participants believed that Remix World was a space for students to become part of a participatory culture in which a shift occurs in the "focus of literacy from one of individual expression to community involvement" (Jenkins 2008, p. 7). In the case of Remix World, intensive support for creating and sharing one's work with others is available from peers or experts, and, according to the participants in the study, the members of Remix World share a common belief that every member is free to contribute and that their contributions matter. Participatory cultures like those exhibited in Remix World also allow, to varying degrees, social connection with all members (Jenkins 2008). All students on Remix World have a space to post original content and drive discussion.

Adam and Marcus designed Remix World to be a learner-centered space, one different from the traditional, formal, hierarchical environment typically found within institutional classrooms where the teacher dominates the talking and discussion, a phenomenon Barton (2007) refers to as the two-thirds rule (Edwards and Mercer 1987): talking takes up two-thirds of class time, teachers dominate two-thirds of the talk that occurs within the classroom, and two-thirds of the teacher's talk is either questioning or lecturing. Consistent with the findings of other research examining youth online (e.g., Ito et al. 2009), on Remix World students drive the discussions. Yet, the space also provides social supports in the form of mentors who offer feedback and provide occasional interventions in order to model appropriate forms of interaction within a participatory environment. For example, Adam noted, "[DYN mentors] encourage students to have certain types of appropriate productive interactions. [DYN] prioritizes that as sharing media, critiquing media, there is some level of social agency." Adam continued, describing how he interacts with students on the site in order to scaffold appropriate practices: "My interactions with students

[are] less about going directly to someone's page, and more about seeing a posting and jump in on that or see a video and make a comment on that from a video posting to go back to their personal profile to post there."

We found that one-on-one interactions between the adult members and students usually occur through the personal profile page, and these interactions typically occur because of an inappropriate post. Inappropriate posts include using media clips that are not suitable for a middle school audience and using media resources without citation and representing the resource as original work. Adam and Marcus noted that inappropriate posts are sometimes deleted from the site. Because the Remix World community is linked to the DYN and school community, mentors can have face-to-face interventions with students who exhibit inappropriate behavior on the site and, if necessary, can leverage the disciplinary structures of the school. (This issue lends itself to further discussions about how to address notions of appropriateness and inappropriateness within networked communities and how the practice of intervention contributes to cultivating a participatory culture and literacy practices with new media.)

Findings from this study show that Adam and Marcus hold similar goals concerning the encouragement of diverse perspectives around particular topics, the embracing of other viewpoints, and the willingness to change one's perspective. Both mentors use modeling, in the form of feedback within discussion threads, and popular media to expand discussions and as a way to make room for differing points of view. Because Remix World provides a space for participation and interaction outside the normal in-school and after school day, mentors and students can engage and interact with one another at various times in the day. Similar to asynchronous online learning networks that use telementoring (O'Neil and Gomez 1998), Remix World allows mentors to track student participation and provide feedback to students in the media arts classes and after school program at any time of the day. Marcus and Adam both noted in their interviews that their intent is to not dominate or take sides in online discussions but to frame them in such a way that students can expand their thinking on an issue. Marcus explained his intentions in entering the discussion that ensued after Tania's "Me and Terrell's Argument" post: "[Tania] is a great writer as it is. It is for us to come and help

to push these arguments, not to intervene and take sides. I put in my two cents—may have been the middle ground. [Students] may have [their] opinions, but let's bring in Aaron McGruder to settle this.”<sup>7</sup> The mentor contributed to the discussion by providing his point of view as well as the point of view of outside sources, including that of the creator of *The Boondocks* (McGruder 2005). When Marcus posted the interview with McGruder, the creator of the show became a contributing resource to the discussion. The course taken by the discussion thread “Me and Terrell’s Argument” was possible because of both the new media affordances within the space and the mentor’s awareness of how to search for and retrieve resources from the Internet.

*Affordance: Authentic Audiences and Communication within a Community Context*

All three participants indicated that they try to write for all members of the DYN program, and all viewed Remix World as a space where the DYN community is represented. Remix World thus serves as an online knowledge-building network (Scardamalia and Bereiter 2006; Zheng et al. 2007) where each member believes his or her contributions are positive for the larger community because these contributions provide different lenses and perspectives on topics discussed in the online space. On Remix World, ideas are explored, analyzed, and synthesized through group asynchronous discussion. Members can assert their identities and points of view on specific topics to meet the needs of their roles within the DYN community and society at large. Marcus told us,

I think making our kids see that—we are not in a world where we can hide stuff from them—rather than run from it. Let them deal with it. They are going to have to deal with it. Tania doesn’t necessarily identify as black: she says that she’s Irish, and she will give me the whole gambit of what she is made of. She understands that she is not monolithic. I think in this society, in this space provides a space to talk about that: we are not a monolithic black society, white society, Asian. We are all mixed up together, and we are living in [a] country where it is going to move more and more towards that. How do we confront these things? How do we let students deal with it?

The student, the mentors, and the designer can structure their responses to fit the various goals and purposes of the site. The student can construct and learn from mentors and peers through her participation within the site, and the mentors and designers learn from students through interactions with the student postings (Edelson, Pea, and Gomez 1996; O’Neil and Gomez 1998; Scardamalia and Bereiter 2006).

Marcus called these interactions, where the participants learn from one another, “true dialogue”:

I’m learning from them. They’re learning from me. . . . Like pretty much back and forth. I think it’s a lot of how the students interact—they’re really active on their page—I can find their identity there, but they don’t really put it out there in the forums. They may post a picture or some work that they’ve done, but they don’t frame the context. Now some students have a video up and a whole paragraph, or links that they want you to see. But for me the best of those are the true dialogues, and I like to look at them. One of the most memorable ones was a conversation. . . . Terrell and Tania was going back and forth about minstrel shows, racism.

This intention for social transformation was most clearly articulated by Tania in her discussion of the “Minstrel Shows” post. The “Minstrel Shows” post was created eight days after the “Me and Terrell’s Argument” post. Tania described it as follows:

The [Minstrel Shows] post is trying to get [DYN students] to see and to realize that [nonblack] people think of them [black people] as a certain way. And if they [African Americans] just . . . portray . . . well, look, if they [black people] portray the negative image, then it is only going to make things worse for them, and it’s going to keep people who are on top thinking about where you are, and it’s going to make your life worse and worse because they [European Americans] are the ones running things.

For Tania, Remix World became a transformative communication tool; it could be used to change and influence herself as well as members within the community or audience (Pea 1994). The interactions on Remix World helped Tania reaffirm her identity as a “smart” student. Yet, the space also allowed her to negotiate and expand this identity within a community context.

This context allowed her to co-construct her racialized identity as she explored, for example, cultural-historical representations of African Americans in the media and considered how these representations affected her, her family, the DYN community, African Americans, non-African Americans, and power.

### Discussion

The student and the mentor and designers of the site had similar cultural practices. The prior knowledge that was activated in Tania's interaction with the site was exhibited in her ability to pool resources from multiple sources, to conduct research, and to publish findings, and was also seen in her self-confidence as a smart writer and in her desire to continuously learn from others and her belief in the value of such learning. Family members, teachers, and the DYN curriculum reinforced these attributes as positive (Barton and Hamilton 1998). The responses to her "Me and Terrell's Argument" and "Minstrel Shows" posts on Remix World affirmed her role in the online participatory culture. Her self- and social identities, belief in diversity of opinion, willingness to change her point of view, framing of context, and use of literacy tools (e.g., copy and paste functions) are repertoires of practices that afforded her opportunities to learn within the environment (Gutierrez and Rogoff 2003). Tania's prior knowledge allowed her to leverage affordances similar to those intended by the designer and mentor, thus properly aligning with the overall curriculum goals of the DYN program.

The three participants in this study perceived similar sets of affordances and practices—for example, being connected to community, reflection, and transformation through the use of popular media. Further, their perceived public identities and roles within the DYN and Remix World communities impacted their goals and intentions as well as how they interacted on the site. This alignment was, in large part, the result of the student's cultural practices and identities at home being easily translated into the DYN and Remix World cultural practices and public identities. The alignment between home, DYN, and Remix World meant the student had more opportunities to take advantage of more of the site's affordances; as a result, her level of participation on the site was higher. This participation was crucial for the student to learn to use multiliteracies. The ability to participate and

through participation learn multiliteracies is connected to the student's perception that affordances and practices on the space are shared and aligned with other community members and their goals.

### Research Implications

Further research is needed to explore and help us understand students who may not align with the cultural practices of the site and/or who do not self-identify as "smart." Are these students more or less likely to participate in spaces like Remix World, and why? What roles do social identity and the value of diversity play in whether a student is considered literate within these spaces? We also need to better understand students' intentions and goals as these relate to self-identity across multiple contexts within the home, school, and society. Understanding self-identification and the relationships a student has with peers and adults as co-constructors of this identity, and understanding how this affects participation in online and offline interactions, are necessary next steps in this work. What roles do social identity and participation have in developing prior knowledge in students so that they are better able to access the affordances of participatory learning environments such as Remix World?

The sample used in this study—three participants—is not representative of the entire DYN population. The goal of this exploratory research study was to describe what was made possible for one student, one mentor, and one designer as a way to begin to understand the literacy practices that are emerging within a new media learning environment. More information is needed from students who have varying levels of participation on the site. A wider cross-section of students illustrating their perceived affordances of the space would allow for a better understanding of whether levels of participation are affected by students' intentions and goals and how these intentions and goals are related to self-identities within online and offline contexts. Further investigation of the interactions between participants and new media learning environments can provide insights into how youth learn as well as the literacy practices that are necessary in order to make meaning within these spaces.

We have a lot to learn from our youth. The ecological framework employed in this study provided a lens through which we were able to explore the

physical and cognitive movement and influences in our student and adult participants across space and time. Using this framework and the notion of affordances of online spaces allowed us to consider how

such spaces can support users in building knowledge, leveraging prior knowledge, and making meaning by drawing on elements from their ecology. We have gained much insight into the many systems and

	<p>TANIA: Terrell and I had an argument. I thought it was an appropriate topic to put on Remix World. It was about the Boondocks. Terrell said that The Boondocks makes black people who are gangsters and thugs stop what they are doing. But I disagreed. I said that having people go on TV and mock what people do and have those people who do it watch it isn't going to make them change. I made an analogy to support my belief. So what if I had a stereotype that all 15 year old boys didn't like school and then 15 year old boys on TV were mocked saying they didn't like school that would only fuel and strengthen my belief.</p>
	<p>STUDENT 2: I agree with you Tania. We had a class about something around this topic. But it was around the "n" word. But back to topic, when somebody said something about the Boondocks, everybody starting throwing in things about that show. That show is a satire, which means the use of humor, irony, exaggeration, or ridicule to expose and criticize people's stupidity or vices, particularly in the context of contemporary politics and other topical issues</p>
	<p>MARCUS: The Boondocks uses humor to wake us up. Sometimes we need to mock "characters" of our community...cause sometimes I think we forget how silly, or sad they are. (Video clip of interview of show's creator)</p>
	<p>TERRELL (brother): The Boondocks is a real eye-opener. I think that some people really do act like some of the ridiculous characters and seeing themselves act stupid on tv can really change some people. Sometimes you have to comedically attack a stereotype</p>
	<p>MARCUS (Mentor): But there is always a very thin line... Remember Dave Chappelle left his show cause somebody "LAUGHED THE WRONG WAY". A good movie to check on Satire is Spike Lee's Movie : BAMBOOZLED.  I think "BAMBOOZLED" was an amazing prediction of what was to come in our society. It seemed a little far fetched at the time (to some). But give it a look and see how it reflects some of the sad trends that have become all to real. (Video clip of movie premiere)</p>
	<p>STUDENT 4: I have seen Bamboozled and think it's a great prediction of how tv and media can shape the outlook of our race.</p>
	<p>STUDENT 5: we make a a fool of ourself we support show and theres a price to pay and that price is to big for any one to pay. dave chappelle left because he was making a fool out of his race. we dont realize how these racial slurs affect our race as a whole</p>
	<p>STUDENT 6: i agree with Tania but then again i agree with your brother because what you are saying is that the boondocks wouldnt make black people stop what they are doing. because it makes them like if they put this out there then its like we can keep on doing what they are doing is what you are saying which is true. but on the other hand your brother is also right because its like they are puting there self out there its embarrassing so im going to stop doing the stuff that i am doing so its kind of hard to pick one thats right because truthfully both of you have good ideas that are both right.</p>

Appendix I: Transcript of the "Me and Terrell's Argument" Discussion

contexts at play and the relationships between these contexts and new media literacy practices. Social networking is a form of communication that requires active, participatory engagement in order to access the affordances within learning environments. Future research needs to explore how students perceive their own social identities as these identities relate to literacy, learning, and participation, as well as how educators position and influence these identities. Much can be learned about how the DYN program is leveraging social networks to encourage the program's cultural practices and to prepare youth to become literate new media artists, scholars, and reflective citizens living and participating within a globalized society.

Much has been written about the "digital divide." Many youth lack a safe forum in which their ideas can be presented, critiqued, and transformed. Spaces like Remix World offer such opportunities. We hope that in coming years other safe spaces will proliferate and that the divide that keeps young people, especially young people of color, "stuck in the shallow end" (Margolis 2008) of online intellectual engagement with peers will be less gaping.

#### Appendix II: URLs of Websites Cited in the Article

Name	URL
Digital Youth Network	<a href="http://iremix.org">http://iremix.org</a>
Facebook	<a href="http://www.facebook.com">http://www.facebook.com</a>
Ning	<a href="http://www.ning.com">http://www.ning.com</a>
MySpace	<a href="http://www.myspace.com">http://www.myspace.com</a>
YouTube	<a href="http://www.youtube.com">http://www.youtube.com</a>

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#### Notes

1. Don Norman was the first to attach J. J. Gibson's notion of affordances to the concept of design. As Norman notes in his online blog, Gibson considered affordances as "actionable properties between the world and an actor" essentially a relationship. Norman comments that he probably should have instead talked about perceived affordances because, in design, "what the designer cares about is whether the user perceives that some action is possible (or in the case of perceived non-affordances, not possible)" (Norman 2010, n.p.). In this article, we mean the design features that essentially create a relationship with the user through their presence, seen or unseen. Like Norman in his later reflection about his use of affordance, we add the notion of perceived affordances or perceptions of affordances as essential to a consideration of the user's interaction with the online environment and its features.
2. DYN is in the process of developing a proprietary system that is independent of Ning.
3. Researchers on the site were primarily part of the larger ethnographic and qualitative study of DYN who were observing and documenting activity on Remix World as a part of the study. Students and other participants who were members of Remix World and who participated in the research study gave permission for DYN staff and the researchers to view and analyze their postings.
4. The descriptions of DYN and Remix World reflect the programs as they were in early 2008. Because the programs are ongoing, some of the details might have changed.
5. With the systems flow chart analytic activity we sought to identify the relationships between participants' ideology, intentions, and goals in the posts and the ecological influences we believe are evident in the posts and interviews. For example, we drew connections from the relationship between Tania's embeddedness in her family ecology, the cultural values that she was exposed to in her family, and her report that a discussion with her brother prompted the first of the two posts on which this study focuses ("Me and Terrell's Argument," January 31, 2008). Similarly, we drew a connection between Tania's family practices (social/political discussions) that she regularly participated in and the cultural practice in the DYN community that encouraged socio-political critique.
6. See appendix I for a full-page view of this posting.
7. McGruder is the creator of The Boondocks comic strip and cartoon.

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