Research Directions

Amy Stornaiuolo, Glynda Hull, and Mark Evan Nelson

Mobile Texts and Migrant Audiences: Rethinking Literacy and Assessment in a New Media Age

It is the first week of Kidnet, an afterschool international digital exchange program for middle school youth, and a young woman in the seventh grade in Oakland, California, sends her first email missive to kids in South Africa and India:

Hey was up 😊

Hi, its me Alana (Lana) you dont know me but hopefully you get to know me. 🤝 I live in the United states of America. In school I am studying on your country. 😊I love to travel so talking to you would be so much fun. I wonder what kinds of things you do. Specifically I live in West Oakland in California. I wonder what city or country you live in. 😊I really hope that you respond back, because I am hoping that we can talk. I love talk, laugh, and get on the computer, playin games and stuff. But also I love soial studies thats why I AM REALLY HOPING TO TALK TO YOU ABOUT YOUR COUNTRY AND YOUR HOBBIES. Do you have any siblings or what languages you speak.

Wel I got to go, Peace 💖

Sinereley, Alana

Blending emoticons, graphics, colors, and text, Alana (all names are pseudonyms) has created a colorful and charming multimodal overture that invites her unfamiliar Indian and South African Kidnet co-participants to begin a conversation across geography and difference in this global social network. Intertwining both the casual register of email (“Hey was up”) and the more formal register of a written letter (“Sinereley”), Alana demonstrates dexterity in weaving together what she knows about letter-writing conventions, email conventions, self-introductions, and online conversations with unfamiliar peer audiences. While Alana is certainly not yet expert in her blending of semiotic features, she does create a semiotic whole that communicates her friendliness and enthusiasm through her youthful play with color, a range of smiling emoticons, pointed capitalization of her featured message, and a balanced mix of personal information and questions about her audience, all designed to convey both a serious and playful tone.

Yet, we wonder how Alana’s literacy skills will be judged on more traditional assessments—against what standards, using what measures, for what purposes? Will those measures reflect the adaptive competencies Alana already demonstrates in reading her audience, for example? Can they take into account children’s facility with a variety of formats, genres, technologies, and social purposes in everyday contexts, particularly children’s abilities to coordinate among multiple kinds of texts?

We have come to ask these questions about literacy and its assessment in light of our work in afterschool programs, namely DUSTY (Digital Underground Storytelling for Youth; see, for example, Hull, 2003) and, more recently, Kidnet (see www.space2cre8.com for more information), in which Alana participates, because we grapple with the dilemma of how to document and measure what participants are learning in these programs. We situate our discussion about literacy assessments in terms of our involvement with these community–university afterschool programs in order to highlight how challenging assessment can be when we operate from a multiliteracies perspective—one that understands literacy as a negotiation of multiple linguistic and cultural differences through the design and redesign processes (New London Group, 1996). If we understand youth to be designers of complex meanings across a variety of semiotic practices, then the tools we use to understand their designs must be sensitive to the kinds of agentic, multimodal meanings they are creating.

However, traditional assessments, which often measure student performance on a set of discrete facts and skills along a standardized, print-biased baseline, seem to us too narrow, too externally driven, and too divorced from everyday literacy contexts to capture the complexities of learning that we see every day in our programs. And yet, exigencies of funding, of what counts as “scientific” research and “progress,” call ever more frequently for these narrower measures of student
learning, just as federal and state policies dictate what counts as literacy in high-stakes assessments in our schools (cf. Hull, 2007). We and others (e.g., Dyson, 2004; Kalantzis, Cope, & Harvey, 2003; Shoen & Fusarelli, 2008) argue that these measures of student learning are based on limited conceptions of literacy as an autonomous and neutral set of basic skills (Street, 1984). Our task, therefore, is to reimagine not just what assessments of multimodal learning look like, but what we mean by literacy itself in a global world.

**“Literacy” in the 21st Century**

Like Alana, Ismael, Alana’s Oakland classmate, wrote an email to his “Kidnet friends” in India and South Africa, but Ismael did not plan his email by writing it on paper first, as Alana did. A self-professed “hacker,” or as he prefers to call himself, “technology enhancer,” Ismael dashed off a quick missive, three brief sentences asking whether “you are cool” and “whats your name,” all in lowercase letters—“you are cool” and “whats your name,” all in lowercase letters and signed off with the command, “send me back.” Practiced and signed off with the command, “send me back.” Practiced at email, proficient with multiple digital media, and a sixth-grade “pivot master” (a term used to describe someone proficient in a particular software used in animations) who creates complex animations that he shares with his blogging audience via YouTube links, Ismael declared that preparing to write an email was unnecessary—“you just write it.” Alana, reading his email later, argued with Ismael over the appropriateness of his tone and phrasing, asking “How they gonna know what you mean, ‘send me back’?” After several Oakland classmates engaged in 10 minutes of heated discussion about slang and its multiple, situated meanings, Ismael put his head in his hands and worried that his new friends wouldn’t know what to send back. Ismael, drawing on his experiential knowledge of online environments, had crafted his message without fully considering whether his language conventions would be shared by his new global partners.

As Alana and Ismael came to understand through the juxtaposition of their emails, new media literacy in our global world requires a sensitivity to the ideologies, mores, and dispositions of people whose life-worlds may be very unlike one’s own. Alana, Ismael, and their classmates had to try to imagine what those other life-worlds might be like and how they might influence and structure multimodal meanings—how would Bakhti, a 16-year-old daughter of a rickshaw driver in India, and Martin, a 14-year-old boy from a farming village in South Africa, interpret Alana and Ismael’s emailed greetings, laden with terms that are saturated with meaning in Oakland, California, USA? Coming of age in a digital and globalizing world, these adolescents must develop and share new understandings of what it means to participate in relationships with others across social, geographic, and historical spaces (Hull, Zacher, & Hibbert, in press; Silverstone, 2007).

Part of our task in redefining literacy in these new times is an enhanced understanding of the role of audiences in our meaning making. Kids, now able to share their digital stories and movies with thousands via sites like YouTube, have expanded potentials for circulating their creations, which makes the issue of audience exponentially more important than in past times. Our audiences, implied, incidental, and overt, no longer are expected to share our geographic location and local understandings: “Neither images nor viewers fit into circuits or audiences that are easily bound within local, national, or regional spaces” (Appadurai, 1996, p. 4). Rather, as our worlds are expanded by the movement of people, bringing with them new ideas and new ways of questioning and thinking about the world, we learn how to imagine new possibilities, in the process learning to become new kinds of people.

Appadurai argues that both mediation and motion allow us to imagine new roles and new worlds to inhabit and create: “When [migration] is juxtaposed with the rapid flow of mass-mediated images, scripts, and sensations, we have a new order of instability in the production of modern subjectivities” (p. 4). In these new times, we can imagine ourselves to be a variety of selves, imagined identities constructed from our experiences in a mediated and connected global world.

Increasingly, youth growing up in this mediated, digital culture, have wide-ranging opportunities to choose how to represent themselves in relationship with others. Whether in drawing, animations, blogs, photo-sharing, music mixing, homemade video clips, or electronic bulletin boards, young people have more choices than ever before in communicating with others. And...
We don’t want to gloss over the huge inequities, both in other semiotic systems (Urciuoli, 1995) and enacted through language and possible future selves (Holland, Lachiotte, Skinner, & Cain, 1998) and enacted through language and other semiotic systems (Urciuoli, 1995).

Our mediated world, filled with digital artifacts and multiple modes and media available for communicating across multiple symbolic systems, offers a particularly rich range of opportunities for self-representation and identity work (cf. Lundby, 2008). These “diverse communicative repertoires” allow us to imagine new identities and new ways of being in the world (Dyson, 2004, p. 214). Just as Ismael chooses to characterize himself as a hacker, Bakhti introduces herself as an artist, and they will have multiple opportunities to complexify, extend, and change those self-identifications as they communicate with one another digitally. Electronic media “are resources for experiments with self-making in all sorts of societies, for all sorts of persons. They allow scripts for possible lives to be imbriicated with the glamour of film stars . . . and yet also tied to the plausibility of news shows . . . . Electronic media provide resources for self-imagining as an everyday social project” (Appadurai, pp. 3–4). In reimagining our definitions of literacy, we must surely take into account the range of diverse communicative repertoires available to our students, which allow them multiple paths for learning. In particular, the pervasive electronic media, which offer potentials for exploring multiple semiotic modes, can invite a playful experimentation with new kinds of representation and communication.1

The vast opportunities for representation and communication available to us, especially through digital means, make clear that new media literacy in our global world requires a familiarity with a range of communicative tools, modes, and media. However, it also necessitates a facility with distinctive semiotic practices, such as the orchestration of meaning across pictures, language(s), and other modes. Indeed, we might helpfully think of literacy now as an increasingly multimodal and multimediad activity, affording and entailing the ability to construct meaning from multiple modes and multiple semiotic systems at once (cf. Finnegarn, 2002; Nelson, 2006, 2008; Nelson & Hull, 2008). As Kress (2003) argues, “. . . there are now choices about how what is to be represented should be represented: in what mode, in what genre, in what ensembles of modes and genres on what occasions” (p. 117). In this new media age, then, as they negotiate our hyper-mediated society filled with video games, music videos, cell phones, TV, and countless other digital media that saturate our everyday lives, children move among modes and media, making and transforming meanings, and demonstrating tremendous flexibility and creativity in their use of cultural tools.

Our purpose as literacy educators, we believe, should be to foster children’s adaptive, generative, and critical capacities so that they can build coherent meanings from the multiple and ever-shifting arrays of ideas, emotions, artifacts, symbolic systems, and interactions that comprise our everyday lives (cf. Hull & Nelson, in press). A culture and a time’s mediational means—our psychological and material tools, if you will (cf. Vygotsky, 1978)—are intimately connected with our capacities to think, represent, and communicate. It’s hugely important, then, to widen our definitions of literacy to include digital multimodality and connectivity as newly available means.

_Redefining Basics = Redefining Assessment_

“Surely it is time for all those interested in multiple languages and language variants, in diverse cultural practices and world views, in the expanding symbolic repertoire of our time to appropriate and re-accentuate this word ‘basics’” (Dyson, 2004, p. 214).

As Dyson argues, an expanded view of literacy, one that allows for multiple paths to success
and takes into account diverse language and cultural practices, requires a new understanding of what we mean by basics. More and more literacy scholars are arguing that globalization, the new knowledge economy, and increasingly diverse and mobile populations require flexible, adaptable, collaborative problem-solving learners (e.g., Gee, Hull, & Lankshear, 1996; Johnson & Kress, 2003). These new basics involve us in “redefining what is meant by terms such as competence, ability, capacity, and intelligence” before we can adequately develop new ways to measure them (Kalantzis et al., 2003, p. 24).

We must address the issue of how to assess these new basics if we hope to foster a socially just vision of literacy (Newfield, Andrew, Stein, & Maungedzo, 2003). In fact, the Partnership for 21st Century Skills (http://www.21stcenturyskills.org/index.php?option=com_content&task=view&id=188&Itemid=110), a consortium of community, business, government, and education leaders, argues that assessment of 21st century skills is one of the most pressing educational issues of our time (see also Silva, 2008). Their report on current assessment practices finds that traditional measures are not sensitive to the kinds of complex thinking and problem solving needed for success in the 21st century—for jobs, continuing education, and global citizenship (Honey, Fasca, Gersick, Mandinach, & Sinha, 2005).

Furthermore, we would argue that traditional assessments that frame and measure literacy narrowly, without taking into account the complexities of students’ multiliteracies, privilege particular students and disenfranchise others. This cycle can perpetuate social inequities and condemn students who score poorly on the assessments to more drill work on the “old” basics. Similarly, Johnson and Kress (2003) argue that the potential for creative and innovative learning that is possible through diverse forms of knowing is constrained by “the meeting of single standards and targets. It is in danger . . . of being used to erase rather than recruit cultural and linguistic difference, to suppress or relegate multimodal communication and representation rather than encourage it” (p. 6).

Traditional assessments of reading and writing, while widely understood to be neutral measures of children’s skills, continue to reward those children who share the linguistic and cultural backgrounds of the test-makers. As Pearson, DeStefano, and Garcia (1998) assert, “assessment is a political act,” one that exerts power and privilege and tells people how they should be valued and how to value others (p. 46). And as long as assessments continue to privilege one kind of linguistic capital (Bourdieu, 1974), schools in particular and the public in general will continue to understand literacy as an autonomous and value-neutral set of basic skills. Without a shift in how we measure literacy, informed by this multiliteracies framework, we will never shift curricula or perceptions of some learners as deficient in this set of basic skills (Honey et al., 2003). This is why Siegel (2006) contends that a redefinition of literacy using a multiliteracies framework should be considered a social justice issue.

However, in reimagining what we mean by assessment, we need to take into account that no one measure could possibly capture the complexities of multiliteracies. If people represent meanings across semiotic systems, using different media and modes, then no one measure can ever fully account for all of the potential ways of making meaning. Part of the problem with traditional assessments is not only that they use narrow measures of literacy—ones often divorced from meaning making in real world contexts—but that they are used as the definitive measure, the sine qua non of what someone knows. Any time we reduce learning’s complexity into a number that is then used to compare people, we necessarily privilege those who make meanings in ways compatible with the measure used. When that number is further used to determine an individual’s opportunities as if it were a neutral and fair assessment of the individual as a learner, we deny the individual the opportunity to demonstrate his/her strengths and constrain the individual’s imagined possible selves (Gee, 2003).

We maintain, as do so many of our colleagues, that it has never been defendable or useful to reduce the assessment of a child’s capacities and potentials to a number. However, the concomitant, conflicting trends of increasing priority placed on quantitative test-based assessment in schools and the increasing diversity of forms of knowledge generated through and expressed in a multiplicity
of communication forms both in and out of schools make traditional test scores all the more irrelevant. An alternative is offering multiple measures at various points in time that engage a variety of semiotic tools and participation structures.

Further, in the same way that no one measure will suffice, it is problematic to treat modes independently of one another. That is, we should work to design measures that go beyond looking at speech or writing, alone or in combination, and instead attempt to understand how modes play into each other. If literacy in our new media age requires the ability to coordinate meaning among modes, and if a qualitatively different system of signification is possible through the semiotic power of multimodal braiding (Hull & Nelson, 2005), then our assessments would do well to at least attempt to capture some of that complexity. As Jewitt (2003) argues: “If learning is multimodal and assessment is restricted to the modes of speech and writing the assessment will ignore (and in the process negate) much of what is learnt” (p. 84). This complexity of multimodal learning and assessment extends not just to the products that students create, but to the processes by which they do so. In other words, we want to examine how students create a digital story, for example, so that it does not exist as an autonomous artifact but as one borne of a conscious and deliberate design process. This means that we can ask students how and why they make the choices they do, especially over time (Nelson, 2006, 2008, Nelson & Hull, 2008). This will allow us to consider how learners integrate a wide variety of texts and knowledge resources in creating new meanings across contexts and time (Nelson, Hull, & Roche-Smith, 2008; Van Meter & Firetto, 2008).

In redesigning assessments, we might also consider the many contexts in which literacy is practiced. That is, many required tests measure discrete bits of knowledge divorced from the everyday contexts in which literacy is practiced. Literacies, always tied to social purposes, enable us to accomplish something in the world, but assessments are often designed with no purpose beyond measuring students’ decontextualized pieces of knowledge. Dyson (2004) calls for us to tie our assessments more closely to the “new basics” that engage multiple semiotic systems within everyday practices: “Thus, re-imagined basics will have to include situating those valued by school within the multiple dimensions of symbolic and, more particularly, graphic systems (from letter font to text type) and the diverse communicative channels and practices of children’s everyday worlds” (pp. 213–214). One suggestion is to design performance-based measures tied to the resources children already use for everyday purposes (Newfield et al., 2003). We might consider the use of artifacts in daily environments to be occasions for assessment, turning a critical lens toward those activities and looking at them systematically. This might mean assessing something that children are already engaged with, in or out of the classroom (e.g., the design of the classroom newsletter for parents) and critically examining the complex processes and resources students must engage with to accomplish it. (In the newsletter example, that might include how children use technology to produce the letter, how they decide who will be authors and who will be editors, what kinds of texts and images they produce, how they make decisions about layout, etc.) This allows us to fashion assessments that more closely reflect both the teaching and learning environments teachers create and the out of school contexts that drive everyday literacies.

These suggestions—to design multiple measures, over time, that take into account the coordination of modes, the interplay of process and product, and everyday literacy contexts—are difficult to imagine in times of accountability and high-stakes testing.
In the next section, we describe our recent attempts to address some of these issues in the context of our afterschool programs. In sharing our ongoing conundrums and our imperfect solutions, we hope to illustrate the iterative challenge of understanding how people learn multimodally. While this setting is an afterschool one, and certainly different from school settings in significant ways, we find that those who fund afterschool programs increasingly demand quantifiable “results”—that is, measurable proof that the program is improving youths’ academic achievement. This mindset mirrors in some ways the accountability demands placed on schools (Hill, 2007; Silva, 2008). Nevertheless, we still have considerable flexibility to try out principles of redesigned assessments, and our hope is that by recounting our attempts to meet assessment challenges, we move a small step closer to reaching our elusive goal of redefining assessments for new literacies in new times.

**Kidnet & Dusty: Assessment & Design**

Dara, a bubbly 13-year-old girl of Guatemalan and American heritage, slowly tried to sink down under the table as her digital story showed on the screen for all of her classmates to watch. Images of her family, juxtaposed with symbols of unity and set to Madonna’s music, told the story of Dara missing her grandfather, her “Papito,” who had died recently on her birthday. When the final credits came on screen—a long list of acknowledgments to all who had helped in her composition—her classmates began dancing to the Madonna song, calling out praise for her story. Both embarrassed and pleased by the accolades, Dara smiled as her classmates and teachers commented on the powerful narrative she had crafted.

In recent years, we have explored the affordances of multimedia, multimodal genres and composing environments through the Dusty project, a university–community collaborative. Bringing together local youth, young adults, seniors, undergraduates, graduate students, and professors, this project’s afterschool, evening, and summer programs taught reading, writing, digital storytelling, filmmaking, and music mixing in urban neighborhoods. In these alternative spaces, youth like Dara participated in crafting digital stories and other digital artifacts, blending old and new genres and media in order to articulate past, present, and possible selves through multiple representational modes.

We have conducted ongoing research on participants’ experiences, paying particular attention to their explorations of new literacies. In order to understand the affordances of these multimedia and multimodal genres and the relationship between these and print-based literacy, we have collected multiple kinds of data to better capture the complexity of the meaning making in which participants engage. Through these measures, we have tried to explore what identities are fostered through access to digital media, social relationships, and contexts for learning. For example, Dara’s story of her Papito revealed her concerns with family and relationships, particularly her desire to be part of a community. Through interviews, field notes, and her digital stories themselves, we come to understand how Dara constructed herself as an able writer and valuable and critical community member within the Dusty space. (For additional analysis of Dara’s agentive repositioning, see Hull & Katz, 2006). In order to develop these understandings, however, we have been involved in the ongoing development of assessments that can help us observe not just what participants engage with, but how and why they do.

In addition to collecting digital artifacts, participant-observer field notes, and formal and informal interviews, we have also collected print-based literacy artifacts, video and audio recordings, demographic data, students’ self-assessments, pre-/post-skills inventories, and pre-/post-surveys. Also, and particularly in response to the requirements of funders, we have collected standardized test scores, which have been used for matched-sample comparisons of children not involved in our programs. Using a variety of angles to understand how youth create multimodally, we have tried to generate a more complete picture than is possible by relying on any one measure. With

2Though this example highlights Dara’s digital narrative, we are concerned with assessment more broadly, including that of school-based knowledge. For an example of a discussion about the complexities of assessing literary interpretive essays, see Beck and Jeffery (2007).
Part of our project has been to develop ongoing, multiple means of measuring students’ learning, which encourages our redesign of the activities and the development of new measures more sensitive to the kinds of expanded literacies evident in participants’ interactions. Like Kalantzis et al. (2003), who argue that not just learners but the curriculum and programming itself should be subject to assessments, we have attempted to assess our own programs and their ability to address learners’ needs, continually refining and redesigning not just our assessments but also our program itself. Many of our efforts have taken place within and benefitted from conversations with colleagues at other universities who grapple with similar assessment issues in their afterschool programs.\(^3\)

We have intertwined such ongoing assessments with program design in the spirit of design experiments (Collins, Joseph, & Bielaczyc, 2004; Design Based Research Collective, 2003). By developing a number of assessments of both the learners and the program itself, collected at multiple points in time, we have continually worked on the program design, refining and shifting the kinds of questions we ask and our interpretations of what we have seen. For example, we noticed that the places that youth composed their stories and lived their lives—the urban landscapes of the neighborhood, the space of the computer lab at the community center, the physical layout of the rooms where they compose at home and in the center—played a central role in shaping their stories. As a result of these patterns, evident in the powerful digital stories of youth like Dara and in student interviews, we came to ask how place, space, and landscape play a role in affording and constructing, constraining and directing, the dreams and practices of our youth.

This evolving question about place, space, and landscape, our observations of how certain digital stories have circulated locally, and the early exchanges of digital stories (carried on planes or sent in the mail) between youth in our local community and youth in other countries, has led us to expand upon the DUSTY program by imagining what role place plays when youth collaborate on a virtual space with a global audience. This virtual space, named space2cre8, is a social networking site currently joining youth in India, South Africa, and the United States as part of the Kid-net project. Participants design, create, and share digital artifacts on the network in ways that they imagine collaboratively. We hope it will allow us to investigate how literacy is defined and practiced in light of the radical diversity and connectivity that characterize new media communication. Specifically, we will examine how this multinational, collaborative network of youth comes to reflect the wants, needs, concerns, and values of its members, and the roles different languages, script systems, images, music, and other forms of communication play in the ongoing development of this network. As youth work across linguistic and cultural difference, we wonder which dimensions of personal identity and cultural knowledge develop and are negotiated within an online community and how.

These questions, which will drive our research and design agendas, ask not just about local meanings, but about the impact that “migrant audiences and mobile texts,” to use Appadurai’s (1996) phrase, have on the design process of youth around the world. Like Dara, participants are designing and creating powerful and personal digital stories, but these stories will have as their intended audience a global community. And we wait to see what other kinds of digital artifacts become salient to the community and how they are taken up and potentially transformed by participants.

To aid us in tracing the evolution of these patterns of participation, the network itself is designed to capture data about participants’ online interactions. We can know, for example, the amount of time that participants are logged

\(^3\)We thank our colleagues at UC Links in particular (www.uclinks.org) for the opportunity to engage in these conversations (see also Underwood, Welsh, Gauvain, & Duffy, 2000).
in, what they post, where they go on the site, what languages they choose for different purposes, and a variety of other data. We will be able to trace how participants collaborate over time and track which artifacts get taken up and which get dropped. We can watch how hybrid genres emerge from creative collaborations and how students develop interests in multiple facets of the network. By paying attention to kids’ interactions, we will be able to understand how they build common ground and communicate across difference, and particularly how they negotiate across linguistic and cultural diversity.

We can begin to trace these questions by collecting data on what participants do. For example, we have watched Alana change her profile picture each week, from an animated picture of Tinkerbell to an animated picture of Princess Jasmine from the film *Aladdin.* And these animated photos sit in juxtaposition to other favorite photos on her site: animated images of Betty Boop, football star Reggie Bush, slain rapper Tupac Shakur, and her young cousins. We will be able to trace how these images get taken up by others on the network, how and where they travel, and how Alana changes them in light of others’ responses.

While the site analytics certainly offer us quantitative measures of what students do online, we must coordinate those with our own qualitative observations offline. We have been recording the conversations and interactions that youth have with one another within each afterschool class, collecting both video and field note data. In addition, we are collecting portfolios of their work in both electronic and print forms, including drafts during all stages of their design processes. These portfolios will help us trace their composing practices across time and between media and modes. They will also enable us to document how students’ self-representations shift over time, so that we can begin to see patterns in Alana’s choices of Disney characters for her profile picture.

In designing assessments to include in the portfolios, we have been mindful to embed any assessments in the literacy tasks that participants are already engaged in. To serve as one pre-measure, we have collected a sample of student writing by asking students to write a self-introduction that could be posted to their profile page on the network. While this pen-and-paper assessment gives us a baseline measure with which to work and serves to address our research questions about students’ self-representation across modes and media, it also functions as a practical activity for the youth. This writing exercise will result in a draft that can be revised for their final profile page introduction. One example of this writing exercise comes from seventh-grader Shani in Oakland:

> Hello my name is Shani. My nicknames are Shani Sho, Shani cake, Sha bleh bleh, Shani pooh, Pumpkin, Nerd, and Money. You should get to know me because I am just a laid back person who is fun to talk to. I have a very dynamic personality but all of my friends seem to like that. I am a very loyal friend that loves to communicate. My favorite colors are lavender and pink. I love jewelry and love all of the bright colors. I love the beach because of the water. I live in the bay area where there is a lot of Marina’s and rivers. I can’t wait to talk to you. I am hoping to get to know you!

> Sincerely, Shani (signed)

We are curious about how the students’ writing will change from their draft to their published online profile biography and whether they will draw on their pen-and-paper drafts at all. Over time, we will ask them to update their profile bios, on paper and online, and we will be able to trace the evolution of the self-representations in print across media. In their portfolios, we will also be able to juxtapose their digital self-representations in various artifacts with those they commit to print, including their changing choices of images and music.

But, as we discussed earlier, simply having evidence of what kids do on and offline will not help us understand what drives their design decisions. In order to situate our understandings, we will use a variety of interview protocols, self-assessments, surveys, and questionnaires that we can examine together with the data analytics, portfolios, video recordings, and field notes. In our iterative design process, we have been refining these measures in an effort to better capture what decisions students are making and what is driving those decisions.
We also want to capture how they see themselves as designers of meaning, as learners, and as participants in both school and afterschool contexts. For example, we can better understand how youth recontextualize images for a variety of purposes, as Dayo did by choosing a Sketchers ad featuring Christina Aguilera dressed as an alluring nurse as her profile picture. Through our interviews with this South African teen, we learned what inspired her to use this picture. To her, it represents the potential to fulfill dual dreams, to become both a nurse and a model. Instead of choosing between these potential selves, Dayo explained that this image represents her hope of merging those two possible future selves.

One goal in our design process has been to develop a variety of measures that incorporate both qualitative and quantitative principles. In one interview protocol, for example, we ask kids about their plans for the future and about their everyday experiences. Their responses are mapped onto descriptor bands that help us determine how positively kids feel about themselves, their school, and their futures. When we measure kids’ responses over time, we can trace to what extent students feel more hopeful about themselves and their lives both qualitatively, through examining their responses, and quantitatively, in scoring those responses along a numeric scale. In another protocol, we ask the youth to explain the design process of a digital artifact, which allows us to determine to what extent they consider their audience in the design, how mindful they were of the semiotic affordances of the multiple modes available, and the extent to which they can critically comment on their own artifacts.

Since the participants themselves are designers of and collaborators within the network, they will be responsible for assessing the program and themselves to determine how the project works for the group. They have already expressed an interest in interviewing one another, so one assessment piece that we have embedded is the capacity for youth to poll each other by designing their own online surveys. Involving the participants in the research agenda and inviting them to take an active role in designing assessments will further our goals of participatory learning. These steps will also play a vital role in helping us assess how effective the program is in addressing their needs. One feature of the site is a feedback forum, which is designed to be run by the kids themselves. In this space, kids offer programming and design feedback, which is then discussed by the research team, teachers, and youth so that a redesign of the program is a collaborative enterprise, enacted both by the programmers and the children interesting in learning to code. This kind of assessment, combined with ongoing offline program assessments, allows us to struggle with the questions: what works, what needs changing, and what are people learning? While we cannot claim to have answers, we feel as if we are trying to work on asking the right questions.

**MAKING THE SHIFT**

As we noted earlier, we have had the tremendous good fortune to be able to explore these questions about literacy and its assessment in an iterative and long-term fashion. But we recognize that this is a luxury teachers do not necessarily share with us, and we hope that some of our experiences might prove useful to educators in circumstances different from our own as they grapple with some of the same issues. We encourage educators to adapt and extend our thinking about how to build in multiple measures for student success in the classroom, taking advantage of the rich cultural and semiotic resources kids bring with them and inviting kids into the process of choosing what to assess and how to do it.

We encourage educators to adapt and extend our thinking about how to build in multiple measures for student success in the classroom, taking advantage of the rich cultural and semiotic resources kids bring with them and inviting kids into the process of choosing what to assess and how to do it.

---

**Authors’ Note:**

Many thanks to members of our research group and the Kidnet team: Adrienne Herd, David Malinowski, Stacy...
Marple, Ayodele Nzinga, Duncan Winter, and Rian Whittle. We also gratefully acknowledge the support of Mike Wood, the Spencer Foundation, the UC Links project of the University of California, and the Graduate School of Education at the University of California, Berkeley.

References
Newfield, D., Andrew, D., Stein, P., & Maungedzo, R. (2003). “No number can describe how good it was”: Assessment issues in the multimodal classroom. Assessment in Education, 10(1), 61–81.


---

**Search for New Editor of Voices from the Middle**

NCTE is seeking a new editor of *Voices from the Middle*. In May 2011, the term of the present editors (Roxanne Henkin, Janis Harmon, and Elizabeth Pate) will end. Interested persons should send a letter of application to be received no later than August 14, 2009. Letters should include the applicant’s vision for the journal and be accompanied by the applicant’s vita, one sample of published writing, and two letters of general support from appropriate administrators at the applicant’s institution. Do not send books, monographs, or other materials which cannot be easily copied for the Search Committee. Classroom teachers are both eligible and encouraged to apply. The applicant appointed by the NCTE Executive Committee will effect a transition, preparing for his or her first issue in September 2011. The appointment is for five years. Applications should be addressed to Kurt Austin, *Voices from the Middle* Search Committee, NCTE, 1111 W. Kenyon Road, Urbana, IL 61801–1096. Questions regarding any aspect of the editorship should be directed to Kurt Austin, Publications Division Director: kaustin@ncte.org; (800) 369-6283, extension 3619.

**Amy Stornaiuolo** is a doctoral student in the Graduate School of Education at the University of California, Berkeley, and a lecturer in the English department at San Francisco State University. **Glynda Hull** is professor of Language and Literacy, Society and Culture in the Graduate School of Education at the University of California, Berkeley. **Mark Evan Nelson** is assistant professor of English Language and Literature at the National Institute of Education, Singapore.