Digital Youth Network: Fusing School and After-School Contexts to Develop Youth's New Media Literacies

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Abstract: This paper examines the Digital Youth Network as a model for developing youths' digital literacy through the fusion of in-school and out-of-school new media-based learning activities.

Introduction

When the 6th graders of today enter adulthood in 2018 what will it mean to be a productive, informed and literate citizen? We contend that being literate in 2018 will require the need to fluidly use multiple modalities (e.g. text, aural, graphic, cinematic, and interactive) to communicate locally and globally for personal and professional uses. An informed and empowered citizen will need to be digitally literate, possessing the ability to both produce and critically consume media in multiple forms in order to fully communicate. This shift in the communicative value of media objects beyond the field of entertainment raises the question of how to ensure that all citizens, especially youth, are prepared to communicate effectively. The national dialogue, through the form of calls for more technology in the classroom, more tech savvy teachers, technology standards (NRC, 1998; ISTE, 2007), and a better prepared workforce (Levy & Murnane, 2004) apparently has placed this task in the hands of schools, with communities and homes providing backup support.

In this paper, we put forth our model, Digital Youth Network (DYN), a hybrid digital literacy program that creates opportunities for youth to engage in learning environments that span both school and out-of-school contexts.

Digital Youth Network

We posit that the Digital Youth Network model is one that explicitly combines the affordances of the different contexts where youth spend their time into one learning environment that not only teaches youth how to use NMLs but also creates meaningful opportunities for youth to use their NMLs. It is a model for the construction of a new youth-serving institution that is not bounded by walls nor time of day. The core of the model spans the worlds of school, home, and after-school activities, and provides youth with: (a) access and training in the use of new media literacy tools; (b) meaningful activities where the development of new medial literacies is essential for accomplishing goals and (c) a continuum of established new media mentors (high school through professionals) who develop students' technical skills, serve as role models, and provide students access to the communities of practice surrounding technology-based careers.

The DYN model focuses heavily on the 6th through 8th grade experience by not only teaching youth how to use new media literacies but also creating meaningful opportunities for youth to use their new media literacies. These opportunities include explicit connections to school-based curriculum, interest-based clubs that require youth to use new media literacies in order to participate, and remix competitions and "open shop" times (both virtual and place-based) where youth are supported in using new media literacies to explore their own questions and push their imagination. To achieve these goals the program is structured into two components: in-school media arts classes and after-school pods. The mandatory school day media classes ensure that all students are exposure to a broad set of literacies while the optional after-school pods enable all students to build on the breadth of exposure received in school and identify skills of their choice to explore in-depth. The combination of in-school and out-of-school programming simultaneously provides a base of knowledge to allow in-school teachers to embed digital literacy into instruction without fear of having to teach kids how to use the new media tools. Below are brief descriptions of components of the DYN Model.

Methods

Participants

We have followed a cohort of 47 learners at Old Orchard, one of three schools currently using the DYN model, across two years beginning in sixth grade. Old Orchard is an inner-city charter school serving approximately 140 6-8 graders from middle to low-income households, most of whom are African American. From this cohort, we are closely documenting the learning of twelve case study learners. We construct technobiographies (Author, 2006) based on accounts provided in interviews and through observations in order to chart learning activities across time and setting. We use interviews to obtain an historical account from the

learner's perspective of the emergence and evolution of projects. Field notes and video collected by researchers and teacher/mentors offer additional data.

Results

Are there changes in students' experience with fluency building activities across the year?

Fluency with information technology has been defined as a combination of skills, concepts, and intellectual capabilities that allow one to use technology to meet personal goals (NRC, 1999). Although there are many kinds of experiences that build fluency, we are interested in those that were more likely to involve some aspect of design, personal expression and/or require more advanced concepts related to computing. To look at students' history of experiences they were asked to indicate the number of times they had participated in sixteen activities that were considered to have fluency building potential. Four categories for frequency of experience were available for each experience type including never, once or twice, three to six times, and more than six times. At both pre and post test, a total breadth score was calculated for each student by counting the total number of activities the student had ever participated in at least once.

History of activity as a function of gender, time, and pod participation. To look at differences in experience as a function of gender, participation in pods, and time, a repeated measures ANOVA was carried out with gender and pod participation as the between subject factors and time of survey as the repeated measures variable. This analysis yielded a main effect of Time F (1, 31) = 140.14 p = .01. Students' breadth score was greater at post-test (M= 11.8, SD=3.09, SE=.52) than it was at pretest (M=4.0, SD =1.99, SE=.34).

Comparison of fluency building experiences of students at Old Orchard with those of students in an affluent Silicon Valley community. In order to have a comparative sample, we collected data from 37 middle school students in the Silicon Valley area of California who were enrolled in a summer school enrichment class focused on game design and the creation of websites. Thirty two percent of the sample is female. Fifty-one percent of the students were Asian American, 35% Caucasian, 5% Latino, and 3% Indian. At the time of the survey, 14% of the students were going into sixth grade in the fall, 46% into seventh grade, and 41% into eighth grade. A subset of the questions asked in the survey given at Old Orchard were in the California survey.

Figure 1 shows the comparison of the mean number of fluency building experiences students had ever participated in for the Silicon Valley sample and for Old Orchard at both pre and post survey. By the end of their sixth grade year the Old Orchard sample had higher means than the 6th through 8th grade technology focused Silicon Valley sample.

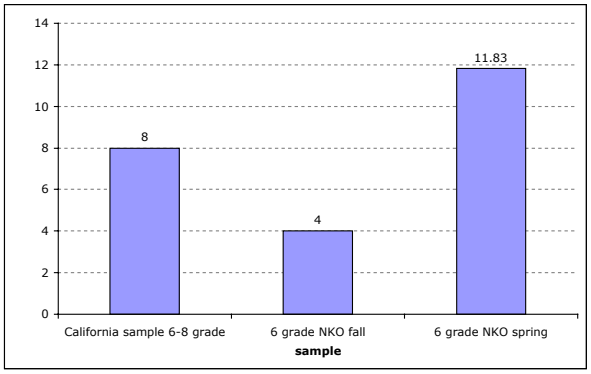

Figure 1. Mean breadth of fluency building activities for Silicon Valley, Old Orchard pre and Old Orchard post.

Discussion

To summarize, the Digital Youth Network combines technical, social, virtual and human resources into programming that spans both school and after-school contexts. Our findings thus far that the DYN model suggest significant growth in students' experience with projects likely to build technological fluency and new media literacy. In addition, both the quantitative data and the qualitative case study data suggest that as learners become immersed in projects, and comfortable with new media tools, their learning activities diversify.

References

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