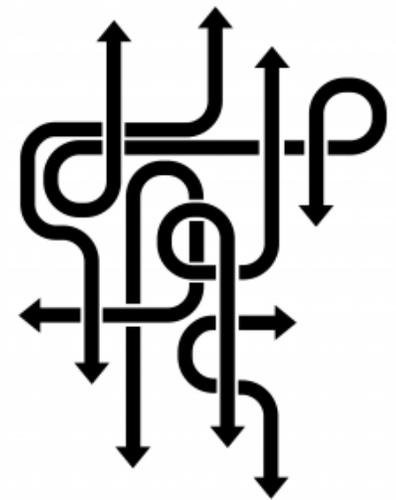




Hive Research Lab Interim Brief
Introduction to Case Portraits of Hive Youth
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Youth Trajectory Research Strand



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Hive Research Lab Interim Briefs are designed to provide the Hive NYC community with ongoing frameworks, findings and recommendations related to the Lab's two research areas: supporting **youth interest-driven trajectories and pathways**, and developing the Hive as a context for **networked innovation**. The briefs are part of a broader effort to connect current research and emerging findings to issues of practical importance to the community in order to improve network activity. Recommendations are preliminary and based either on existing literature or observations of practice within the network.

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Introduction

Recent scholarship has put forth a new vision of learning that highlights the importance of linking youth interest, peer groups and academic achievement (Ito, et al., 2013), prompting efforts to develop new models of afterschool learning that can not only activate youth's innate interest in the world, but also accommodate recently identified shifts regarding how young people learn, what they need to know and how community, culture and technology might help (Davidson & Goldberg, 2009). Hive NYC Learning Network may be considered one such model, as a community of 56 youth-serving organizations that provides engaging Connected Learning experiences for youth through collaborative partnerships among network members.

One of the underlying premises of creating a networked community like the Hive is that the continued support and information sharing among members may also facilitate the development of interest-driven engagement among youth. The Youth Trajectories strand of work is primarily interested in this notion, seeking to (1) understand how youth who participate in Hive programs are pursuing their interests both within and outside of the Hive network and (2) identify some of the key factors supporting this engagement. The focus of this and forthcoming briefs is to begin to address these research areas in some small way through early-stage conceptualizations and preliminary findings drawn from the ongoing interviews and fieldwork with Hive youth.

What do we mean by 'Youth Trajectories'?

While metaphors like 'pathways' and 'trajectories' are often used to characterize the learning lives of youth, it should be noted that such terms carry certain limitations.¹ For example, 'trajectories' can imply smooth transitions between learning stages in the direction of increasing mastery, even though most would probably agree that this is usually never the case. Even 'pathways' can be problematic because it can suggest established patterns of engagement and not honor the unique and idiosyncratic experiences of youth as they explore various contexts for learning and experimentation. 'Pathways' may also not reflect the multiple interests that youth are pursuing as they discover, adopt and discard various identities. Scholars have suggested 'rhizomatic pathways' and employed other metaphors like 'on ramps' and 'lane changes' as ways to capture more of this complexity.

In our work, we will continue to use the word 'trajectory' and 'pathway' as shorthand for our investigations into the nature of interest-driven learning among youth. However, we do intend to describe the twisting and turning, stopping and starting, deliberate and unexpected nature of youth engagement as they explore various interests over time. In particular, we are concerned with the moves that young people make to leverage their social learning ecology, i.e., the family adults, non-family adults and fellow peers that they rely on. We are especially keen to understand the 'support-seeking practices' of youth who strive to gain access to scarce social, material and institutional resources through these social relationships.

This brief serves as an opener to this discussion – in forthcoming reports, we will delve more deeply into these issues, as well as bring in scholarly work being done in the area. We begin with an overview of demographic data of Hive youth drawn from survey work conducted by the Connecting Youth: Digital Learning Research Project team. Next, we introduce our five youth case studies and share some early findings related to how their participation in the Hive played into the development of interests and passions.

Demographics of Hive Youth

We begin with a summary of the survey data that has been collected by the Connecting Youth: Digital Learning Research Project² team based at New York University. During 2011-2012 and 2012-2013, members of the Connecting Youth project have conducted surveys of youth engaged in programs funded through the Hive Digital Media and Learning Fund. The aggregate sample over two years represent 494

¹ As mentioned at a recent Connected Learning webinar (<http://connectedlearning.tv/learning-pathways>)

² We want to thank the Connecting Youth Project for giving us permission to include this information. Hive NYC members may access the full report at: <https://minigroup.com/posts/327379>

youth, with the following composition: 61 percent female; 76 percent 14 years or older; 30 percent African American/Black, 27 percent Hispanic, 27 percent Other/Mixed Races, and 16 percent White. Also, 92 percent of the youth sampled attend public schools and on average do well in school, reporting grades between an A and B average.

Most relevant to questions related to youth interest-driven learning is the information gathered regarding socioeconomic factors, family structure in the home and parental education levels. These are important contextual factors that may affect a young person's educational, physical and behavioral outcomes – for example, children in single parent, multi-sibling households may experience less parental involvement (Astone & McLanahan, 1991; Coleman, 1998). Lack of home support may have important implications for supporting interest-driven pathways, especially when an interest is still new to the youth and reinforcing that interest through continued engagement may require access to scarce resources. With that in mind, it is important to note that 51 percent of African American/Black youth in the sample reported living in single-parent homes, as compared with just 11 percent of White youth. Due to logistical issues common to many survey-based inquiries, the sampled population represents only a small portion of all youth who participated in Hive programming during that time period and of course needs to be contextualized with this in mind. Regardless, the data gathered thus far is a promising step towards gaining a sense of the diversity of youth who participate in Hive and the attendant issues with regards to youth interest-driven trajectories.

Case Portraits of Hive Youth

With this network-wide snapshot of Hive youth in mind, we now introduce the work we are conducting to describe the 'learning lives' of five youth, with the idea that following the dynamics of individual experiences in all their idiosyncrasies and nuance may help surface important themes and issues. We met with each youth on a regular basis for the past three months and plan to continue following at least a subset of these cases until the summer – and will continue to update the Hive community as their stories unfold. Here we provide brief descriptions of each youth and then follow with accounts of how their participation in the Hive played into the development of interests and passions, charting (1) how they discovered and got involved with Hive programs, (2) what their experience in the program was like, and (3) what happened after the program ended.

Methodology

Beginning in August, we conducted background interviews with ten youth and then selected from that pool five individuals to interview on a semi-monthly basis in order to build longitudinal case portraits of teen interest-driven pathways. We also observed programs these youth were in and interviewed the educators they interacted with. All told, the early findings in this brief are based on 14 youth interviews, 4 educator interviews and over 30 hours of program observation³. Table 1 provides a snapshot of each youth.

³ We extend our deepest gratitude to all the youth and adult participants who so generously gave up so much of their time to meet with us and help us learn more their lives in the context of this study.

Table 1. Brief description of five youth case studies⁴

Clarence Johnson is an 18-year old male of South Asian heritage. He and his older sister currently live with their mother. Bengali and English are spoken at home. He graduated last May from a public high school in Manhattan. His interests include: photography, video editing, creative coding, industrial design, longboarding, and education reform. Clarence is/has been a part of four Hive-affiliated programs or events: as a participant and then mentor in two iterations of a wearable technology program, as an exhibitor at a youth technology and design fair, and as a mentor-videographer of a game design program for skater youth.

Freélyn Sapphire Domenico is an 18-year old female of Dominican heritage. She lives with an older brother and sister and their mother. Spanish and English are spoken at home. She and Krissy each call each other their best friend. She graduated last May from a public high school in Queens. Her interests include: photography, graphic design, filmmaking and skateboarding. Freélyn has participated in two Hive-affiliated programs that were organized by the same Hive organization. Both programs targeted skater youth; the first program focused on filmmaking and the second program focused on Arduino-based game design. Like Clarence and Krissy, Freélyn was brought on as a mentor-videographer.

Krissy is an 18-year old female of Dominican and Pakistani heritage. She lives with her younger sister and their mom. Spanish and English are spoken at home. She and Freélyn each call each other their best friend. Krissy graduated in May from a public high school in Queens. Her interests include: film editing, skateboarding, and law. Like Clarence and Freélyn, she was a mentor-videographer at the Hive-affiliated program targeted at skateboarder youth (the second iteration). This program provided her first exposure to filmmaking.

MCMotherboard is a 17-year old female who emigrated from Nigeria about five years ago. She and her two siblings currently live with foster parents. English and Yoruba are spoken at home. She's a senior at a public high school in Manhattan. Her interests include: technology, engineering, design, volleyball and reading. For the past 4 years, she's been a member of a year-round technology and design program. She has been very active in Hive opportunities including serving on a youth committee that helps plan a youth technology and design fair, presenting at this youth technology and design fair, and presenting at a popular conference for DIYers and makers in Queens.

Anthony is a 16-year old male who emigrated from Jamaica about a year ago. He lives with his younger siblings (two sisters and a brother) with his parents, uncle and aunt. English and Jamaican Creole are spoken at home. He is a sophomore at a small public high school in Brooklyn. His interests include: tinkering with technology, Spanish and photography. Anthony has participated in two Hive-related activities: a one-day design challenge aimed at spreading awareness of teen sexual cyberbullying, and a program to design and develop a location-based mobile game.

We decided to focus on high school students or recent high school graduates from non-dominant communities in order to better conduct cross-case analyses and uncover information relevant to the population of Hive youth we serve (survey data from the CY project indicates that the majority of Hive youth come from non-dominant communities). On the other hand, we also wanted to represent a range of experiences, so we selected youth with different levels of expertise with digital media and technology and clarity around personal interests (i.e., interested in many things, interested in one thing, does not articulate a strong interest in anything). Three of our cases are U.S.-born; one young woman immigrated to the States from Nigeria when she was in middle school, and one young man immigrated to the States from Jamaica about a year ago. All five youth were participating in a Hive-affiliated program at the time of the initial interview during which we asked about their general background, their experience with computer-related activities and their current interests. Subsequent monthly interviews were conducted to elicit developments related to their interest-driven activities as well as to learn more about their learning ecologies, i.e., the places, people and learning resources that support their learning (see Barron, 2004, 2006). The interviews were semi-structured in that we generally followed a predetermined set of questions targeting issues we felt were important, but also let the conversation be directed by what each youth wanted to talk about in terms of her interests and important events in her life. It should be noted that findings from case studies most often

⁴ All names are aliases chosen by the youth participant.

cannot be generalized to the larger population as a whole; rather the strength of this research method lies in its ability to allow the researcher to dig deeper into a complex social phenomenon and, through careful analysis of a chronology of events, begin to draw inferences concerning relationships pertaining to real-life phenomena (Yin, 2003).

Initiation into Hive

So how did each youth even find the Hive? Exploring this question has relevance for youth recruitment, both in terms of getting youth through the door and also for targeting youth with certain skills, dispositions, backgrounds and interests. Table 2 describes how each youth first encountered the Hive.

Table 2. Description of Hive initiation
Clarence Johnson heard about a Hive-funded wearable technology program through his connection to a teaching artist that was leading the program. When this teaching artist posted on Facebook that she was holding a wearable technology workshop (the precursor to the Hive-funded program), Clarence decided to follow up on this opportunity to “hang out” with this teaching artist whom he calls his mentor.
Freélyn Sapphire Domenico heard about the two Hive programs she has participated in through the founder/executive director of a skater youth organization where Freélyn is an intern. This skater youth organization was a partner on both Hive programs; the founders have not generally passed along any other Hive-related information to Freélyn or their other youth.
Krissy heard about the Hive through her involvement with the skater-youth organization mentioned previously. Like Freélyn, she heard about two Hive programs by receiving an invite to join the program on Facebook, sent from the founder/executive director.
MCMotherboard’s involvement in Hive programs and events is connected to the design and technology program she is involved with that is run by a Hive member organization. The program is yearlong and youth meet once a week for two hours. The two program facilitators often bring up Hive opportunities and encourage their youth to participate.
Anthony learned of Hive opportunities through the coordinator of the yearlong technology training program that he is a part of. The coordinator of that program occasionally sends an email blast with opportunities (Hive and non-Hive related) to his group of trainees.

The majority of youth profiled here learned about Hive programming through an adult they knew and trusted. For example, Clarence heard about a wearable technology workshop at an arts and technology organization through a teaching artist whom he looks up to and calls his mentor. When that mentor posted on her Facebook feed that she was doing a workshop on wearable technology, Clarence immediately decided that he wanted to be there. Said Clarence:

I knew [teaching artist] through [video game art collective] before, so we were already friends before. So one day on Facebook she just posted, “I’m doing an after school workshop,” and I was like “What, hang out with [teaching artist]? Let’s do it.”

That weekend-length workshop turned into a longer Hive-funded program and Clarence enrolled in that too, which lead him to present the games he developed there at a Hive-affiliated youth technology and design fair. Clarence also became acquainted with the director of education and another teaching artist at the organization that hosted the program. When the teaching artist heard that another Hive member was looking for videographer-mentors for a game design program for skater youth, she recommended Clarence because of his filmmaking and programming experience. This connection lead to Clarence’s third instance of participation in the Hive.

Also, from these cases, it seems that non-Hive-affiliated programs at Hive organizations can serve as ‘feeders’ for Hive programs, which is of course to be expected for a number of reasons. Youth at Hive organizations (whether or not they are part of an official Hive program) are more likely to hear about Hive events; such youth may already be more inclined to be interested in Hive-affiliated programming; and youth may see these

trusted adults at their organizations as serving a curatorial or recommender function for them. For example, MCMotherboard has been part of an ongoing design and technology program at a Hive member organization since her freshman year of high school. This program meets once a week at the organization. The program facilitators regularly provide information about Hive and non-Hive opportunities either during or after the meetings. Accordingly, MCMotherboard has participated in several Hive-affiliated opportunities, including being part of a youth leadership group that helps to plan an annual youth design and technology fair, presenting at a popular conference for DIYers and makers in Queens, and writing for the Hive's youth column on a popular newsblog. She mentioned that the adult facilitators of her program "tell you more about [the program] before you go there. They know what goes on there and they know your personal interests, so they [can help determine that the program in question is] not like a program that gives an amazing description of what they do, but they don't actually do that." Similarly, Anthony, through his engagement in a yearlong technology training program at a Hive member organization, has learned of and participated in two Hive-affiliated programs: a one-day event to conceptualize a web campaign and tools to spread awareness of teen sexual cyberbullying and a 15-session program to design and develop a location-based game. He learned about these events through email blasts that the coordinator of his program had sent out to all the youth in the program.

Krissy and Freélyn's experiences point to the strategy of recruiting for a specific type of youth through a partnership with non-Hive organizations that have pre-existing relationships with such youth. Krissy and Freélyn are both part of a non-Hive organization that specifically provides opportunities for youth skaters – Freélyn had joined this organization about two years ago when she was looking for youth skate camps to attend. When a Hive member organization wanted to develop a program specifically targeting youth skaters, she partnered with this youth skater organization and the founder and executive director of this organization notified the skater youth in her network, including Krissy and Freélyn. The downside to this situation in terms of building Hive awareness is that the founder and other adults in the organization have not shared news of other Hive programs with their youth, though it is of course theoretically possible for this to happen.

It should also be noted that while recruitment often involved a trusted adult, the mode of communication was generally not done face to face. Based on the conversations we had with youth about both Hive and non-Hive affiliated opportunities, we found that Facebook was a common way that youth learned about events (via being friends with an adult mentor and seeing a status update or getting an invite from an individual or an organization's Facebook page). Youth who had connections to adults also reported receiving emails, phone calls and face-to-face recommendations, although at least one program educator we talked to expressed frustration over how such modes of communication are relatively more time consuming and cumbersome for broadcasting an opportunity to a large group of young people.

Overall, leveraging relationships with Hive and non-Hive organizations may be a viable strategy for recruitment. Furthermore, from the perspective of the youth we profiled, affiliation with a Hive organization seems to provide a valuable conduit to information about Hive events and opportunities.

Youth perspectives on Hive experiences

By and large our case study youth enjoyed and recognized the value of the programs they were involved in. Interestingly, sometimes youth articulated benefits that corresponded with implicit skills inherent in the program as opposed to what the program may have been advertised as purporting to teach. For example, in discussing the wearable technology program, Clarence said that, beyond being given the chance to improve his coding skills, he "[got] a lot of experience in just how to set up a workflow, just like the general idea of how to work." Anthony also appreciated how the structure of his game design class in which youth organized themselves into teams specializing in research, writing, programming and design mirrored how some professional game companies operate. Said Anthony:

...The fact that each of us are split into teams I really like that whole idea because one thing I've read about is people who develop games, they often have separate teams, which carry out separate functions and to actually be able to do that... that's really fascinating for me.

This seems to indicate that youth may value a variety of things about a program and that they might see programs as having residual effects that are content independent and transferable to other contexts. Another interesting observation that emerged from our data concerned a tension inherent in a common feature of youth programs: the capstone event (see below). We include these brief accounts to highlight the practical challenges of developing successful programming that provides both appropriate scaffolding and real-world connection. Overall, what youth value and how that plays into how they choose to spend their out-of-school time adds important details to the picture of supporting interest-driven pathways and what the drivers of that behavior might be.

Opportunities and challenges of capstone events

In many of the programs we've observed, there has been a capstone event in which participating youth are able to publicly show what they have created in the program. Creating a public culminating event certainly has benefits, as exemplified by Freélyn's experience two years ago when the first film she had ever made – about female skateboarders – was screened at a popular event.

Freélyn: It was screened at [skateboarding event]. They brought a huge projector and they put like a white screen in the skate park. It was really cool.

Interviewer: What was the reaction like?

Freélyn: I was really excited. And I got a lot of people knowing me after that. Like, a lot of kids from the skate park, they go, "Oh yeah, you're that girl from that video," "Oh yeah, you're that chick that filmed that video" or "edited that video." Cause a lot skaters, they put like these benches in front of the screen in the skate park. So that was like, I've never seen such a thing and then a lot of skaters were watching it and they were all like, "Look at you, look at you." It was so funny; it was embarrassing but it was cool.

Her comments indicate the positive influence that a public showing can have in terms of the recognition and affirmation of a "possible future self" (Markus & Nurius 1986) – in this case Freélyn as a filmmaker. However, we also happened to capture an interesting tension to capstone events in terms of how it can compete with another valued goal of youth programs, to encourage skill mastery. In a debrief with the educator of the location-based game design program, we discussed the challenges the educator faced in the final weeks of the program, when the educator spent a substantial amount of his own time between sessions with youth polishing the game. He also mentioned that he had to sometimes move the class along even though he noticed that productive interactions between peers were occurring.

Educator: I wish I had more time for [other students] and for [Anthony] to move from team to team and then do stuff. But we were on a very tight schedule, so I couldn't afford time wise for him to explore that. I think if I were to do it again I would let it happen more, let him just go and program.

Interviewer: He was programming?

Educator: He was programming, so he was like programming - but because he was coming in as a beginner programmer, [another student] had to explain to him what was happening in the program, so there was - and then in the meantime we had to have a working first game to play. By seeing the big picture, we needed to move forward. I felt really bad about it, but at the same time we had that schedule, we needed to have that working game.

This exchange highlights the delicate balancing act program educators must perform in order to meet the various learning goals and outcomes of a program.

'Post-Hive' experiences

So far, we have provided stories related to Hive awareness and touched upon some experiences our focal youth have had participating in Hive programs. In this section, we report on what happened to youth after the Hive program or event in which we first met them ended. In addition to being interested in the choices

they making, we were looking for evidence that might indicate what sort of contextual factors might drive pursuit of particular activities. Table 3 provides short summaries.

Table 3. “Post-Hive” experiences related to interests

When we spoke to **Clarence Johnson** as the skater youth program was wrapping up, he had recently resolved an emotional experience having to do with his dissatisfaction with the state of formal learning. After having a “crisis meeting” with a mentor at an organization connected to his school that helps students develop passion projects, he decided to take a gap year and work on an initiative to bring more youth voices to the education reform conversation, a plan that included developing a website to engage youth and making a documentary. Then in November, Clarence was nominated for a Thiele Fellowship, a two-year funded opportunity for individuals under age 20 to develop their passion projects. Clarence is currently participating in the wearable technology program again (this time as a mentor) and waiting to hear whether or not he has advanced to the second round of the fellowship application process. He has also accepted an offer to attend the Glasgow School of Arts to pursue industrial design.

After the game design program, **Freélyn Sapphire Domenico** continued to intern at the youth skater organization. She also began developing a plan to open a skate shop, which would allow her to continue using her graphic design and filmmaking skills. She has decided on a company name and has filled a notebook with ideas and content related to her plans: day-by-day details for a skate tutorial that she would post to her website; ideas for video shots she would like to film, sometimes inspired by shows like *Gossip Girl*. In December, she asked an owner of a skate team in New Jersey if she could be a part of his team and he enlisted her as the team’s videographer. She has also arranged for the founders of the skater youth organization and a program facilitator at a Hive organization to lend her video equipment. Freélyn is also currently attending the Borough of Manhattan Community College (BMCC) and majoring in graphic design.

When we first spoke to **Krissy**, she was finishing up her video about the skater youth program and she seemed excited about her exposure to filmmaking, something she had been interested in trying out for some time. She mentioned that she had told her mother and grandmother about her interest in being a video editor and also made plans to buy a laptop so she’d be able to continue editing after the Hive program was officially over and she could no longer use the organization’s laptop. A month later, Krissy’s interest in video editing seemed to have waned and she told us she had decided to keep her major at BMCC as criminal justice. The following month when we spoke again, we learned that Krissy switched her major to video art and technology and is again making plans to save enough money to buy a laptop. She and Freélyn have discussed the possibility of sharing equipment – Krissy would provide the laptop and editing software and Freélyn would provide the camera equipment.

After the DIY/Maker event (where we first met) ended, **MCMotherboard** has continued to participate in the ongoing design and technology program that she has been a part of since her freshman year at high school. She recently joined a youth group that organizes a youth technology and design fair (she’s participated previous years as well). As a senior, her main focus has been applying to engineering schools and for scholarships. In December, she learned that she was awarded a full scholarship to a private engineering college on the east coast. As a scholarship winner, she has been introduced to a community of other past and current scholarship recipients and through that network has since learned of many other scholarship opportunities, which she is currently applying for.

After the game design program ended, **Anthony** continued to fulfill his obligations towards the technology training program that he is a part of. He is also working on his Spanish and doing feature- and price-comparison research on camera equipment. He continues to keep in touch with his friends in Jamaica and they recently encouraged him to create a page on Facebook, where Anthony offers to use Photoshop to edit image files that people send him for free. He is also working on securing enough money to buy his own camera. As a birthday present, his aunt has agreed to put down \$100 towards a camera purchase and he recently applied and was selected for a competitive paid internship position at a major museum.

Understanding the complex relationships between a youth’s experiences, values, interests and future activities is an ambitious and highly complicated endeavor that is beyond the scope of this brief. However, one example does show how a Hive opportunity may have triggered a nascent interest in a youth, as well as where future engagement in that interest remains uncertain. When we initially spoke with Krissy, she was still working on her video using the laptop and editing software on loan from the Hive member organization she was involved with. Krissy expressed enthusiasm for filmmaking, saying “I basically did everything that a filmmaker does, so I got hands-on with everything, which I really liked. I filmed, I edited, I made up the story.” We also discussed her future plans after the program was over. Krissy showed personal motivation to

pursue her interest in filmmaking (video editing in particular), even sharing a plan to purchase the necessary equipment to continue that interest⁵.

Interviewer: So, what happens now, once the program ends, in terms of where you're going to go with...do you want to continue learning video editing?

Krissy: Yeah, I'm actually going to buy my computer after this [interview].

Interviewer: Ah, exciting!

Krissy: Yeah, and I'm going to get Final Cut on my computer and then the next step is buying a camera.

Interviewer: Ok, and so you think, your plan is to just kind of now try to do a lot of things on your own kind of thing?

Krissy: Yeah.

However, a week after that conversation, when we happened to see each other at the program's culminating event, Krissy mentioned that she wasn't able to make the purchase because the store employee required a State ID card and Krissy hadn't gotten one yet. At our second interview about a month later, Krissy had not bought a laptop or any filmmaking equipment, nor had she pursued any filmmaking or video editing activities. Instead, she was looking forward to starting her classes at Borough of Manhattan Community College, where she felt that she would be able to better work out what she wanted to do. Also, she decided not to bother with changing her major from criminal justice (referred to previously as her "back-up" major), which she had chosen when she first applied.

Interviewer: Do you feel like filmmaking, that's still like an interest of yours?

Krissy: It is, but I don't have the time. Like all I've been doing is going home and work. I really haven't thought of myself lately.

Interviewer: Like if you could say what you're really interested in right now, would you have any sort of ideas about that?

Krissy: Right now all I'm interested in is school and getting back to school, but as soon as I get back to school I know I'm going to be interested in everything.

It seems that Krissy's interest in video editing was high during and towards the end of the program and then faded after the program was over, although during our most recent meeting, which occurred about a month after the interview just described, we learned that Krissy had decided at the last minute to switch her major at BMCC to video art and technology. Regardless of whether or not Krissy would be better off pursuing either interest is an open question and not one that we are concerned with—rather we are interested in this series of events because it offers some clues as to factors that may contribute to sustained engagement. One explanatory factor we are considering is the importance of access to engagement opportunities at critical time points. Because video editing was a new interest for Krissy (she had never experienced it prior to the skater youth program), it may have been critical for her to have additional opportunities to engage in that interest right after the program had ended in order for that interest to be further cultivated. Interest researchers have reported that in order for a new interest to stabilize into a more established, internalized one, continued opportunities for reengagement are key: "Even if one has a genetic predisposition for a particular activity, he or she needs to have models, instruction, and opportunity relevant to that activity for interest to be triggered and to develop" (Hidi & Renninger, 2006, p. 117). Of course, there are other additional factors that could help explain Krissy's interest trajectory, including possibly the critical feedback Krissy received from her grandmother who urged her to select a more lucrative career. We would like to learn more about the elements of Krissy's past that intersected with or influenced her thought process in terms of deciding which major to pursue, between criminal justice, an older interest, and her newer one

⁵ It is also interesting that her strategy was to purchase everything she felt she needed, as opposed to relying on social connections to borrow equipment, a strategy that has been expressed by other youth.

having to do with filmmaking. In future briefs, we hope to uncover additional evidence that can provide a more substantiated and detailed explanation for Krissy and all of our youth cases. Overall, we hope this vignette serves as an effective reminder of the tenuous business of triggering and maintaining interest-driven learning pathways among youth. Developing strategies to provide long-term social, material and institutional supports to Hive youth is an ambitious though rewarding challenge for the network to meet.

Conclusion

The intention of this brief was to address a network goal of supporting youth interest-driven pathways by introducing a line of research centered on a youth-centric view of this phenomenon. Our goal going forward is to continue to share relevant details about our youth (and others we may enlist in the future) as their complex and fascinating stories unfold. We will remain agnostic as to the particular interest that our youth pursue—rather, we will focus on the contextual factors that affect the cultivation of those interests and the ways that we can best support that process.

The majority of youth profiled here learned about Hive-affiliated programming through an adult they knew and trusted. Affiliation with a Hive member organization seems to provide youth with a valuable conduit to information about Hive-related events and opportunities. Access to such programming benefits both youth who have never encountered such topics before because engagement in the program may trigger an interest or support an emerging one, and advanced learners may value the opportunity not so much to continue their interest but to develop their skills and receive additional leadership opportunities such as mentoring other youth or speaking at a conference. Creating a diverse social ecosystem of learners and educators is optimal, as youth at various levels of expertise serve distinct and necessary functions both within an educational program as well as a regional ‘youth learning community.’

Also, given that engaging in digital media and technology often requires outside expertise (a social resource) and equipment and software (material resources) that are generally not readily available to all youth, providing these opportunities through Hive-affiliated programming is essential. However, youth seemed to also find value in their experiences that went beyond the explicit content of the program. Relationships with adults and peers in the programs and engagement in real-world projects were also important.

Finally, youth’s interest-driven pathways may be affected by a variety of factors including interest level and the presence (or absence) of social and material supports. As helpful and enriching as afterschool programs can be, we should also recognize what impacts we are making to truly pave the way for interest-driven pathways. This includes being aware of the possible advantages and disadvantages to hiring temporary teaching artists and experts and providing “program-embedded” resources (e.g., video equipment, Arduino boards, video editing and game design instructors, etc.) that seemingly—from many youths’ perspectives—vanish when the program is over. How can we cultivate new and established interests long after the program experience has ended? How can we prevent what one might call a “post-program slump”? As our research on youth trajectories continues, we will share the ways we see these issues playing out over the long term within the network.

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