RETHINKING PEDAGOGY IN URBAN SPACES: IMPLEMENTING HIP-HOP PEDAGOGY IN THE URBAN SCIENCE CLASSROOM

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Abstract

A significant amount of research regarding Hip-Hop Based Education (HHBE) fails to provide insight on how to incorporate elements of Hip-Hop into daily teaching practices; rather Hip-Hop based educators focus mainly on incorporating Hip-Hop culture into curricula. This study explores the benefits of using two specific Hip-Hop pedagogical practices in an urban science classroom. Call-and-response and co-teaching, two different pedagogical approaches that are related to Hip-Hop culture, were implemented and studied to understand their benefits in an urban science classroom. Participants in this study are middle school students who attend an urban school in one of the largest school systems in the country. This study provides insight on ways Hip-Hop can be incorporated into the art and science of teaching, extending current HHBE research, which mainly discusses how Hip-Hop can be used to design curricula based on music and rhymes. Through this study the researchers find that Hip-Hop pedagogical practices studied in this paper support students science content acquisition, connects science content to students' realities, and encourages their voice and agency.

Keywords: Hip-Hop pedagogy, urban education, science education

In both authors experiences and observations as science educators in the same school system where we obtained both our primary and secondary educational most a decade apart from each other, we have each noted a significant lack of engagement and what can be described as an aversion for learning science among African-American and Latino/a students. We argue that there are many reasons why students of color may not be interested in science including "envision[ing] the field of science as distant and inaccessible" (Basu & Barton, 2007, p467).

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According to Munce and Fraser (2012), African-American students' interest in STEM has decreased significantly over time, is now lower than that of any other ethnic group, and is expected to remain low in upcoming years. Additionally, there is an achievement gap in science that exists between African-American / Latino/a urban students and their counterparts from other ethnic and less diverse social settings. Yet there continues to be an ongoing misunderstanding of the experiences and realties of these African-American and Latino/a students who predominantly populate urban settings (Kahle, Meece, & Scantlebury, 2000; Seiler, 2001). In order to gain insight into urban students' experiences, we argue that it is time that science education researchers develop and suggest innovative approaches that "focus explicitly on understanding the realities of youth within urban classrooms and supports the teacher in utilizing an understanding of these realities as an anchor for instruction delivery" (Emdin, 2011, p. 5).

Hip-Hop culture has impacted youth populations across the globe, especially youth of marginalized groups, since its conception. Though much research has been published in regards to Hip-Hop Based Education (HHBE), researchers mainly focus on how to incorporate Hip-Hop culture into school based curricula, particularly using English Language Arts curricula (Hill & Perchauer, 2013; Morrell, 2002; Morrell & Duncan-Adrade 2002; Seidel, 2011). There are not many studies about the pedagogy of Hip-Hop, specifically the art and science of using Hip-Hop as a teaching approach in the classroom (Hill & Perchauer, 2013; Morrell, 2002; Seidel, 2011). Emdin's (2010) research addresses the need to meet students on their cultural turf by engaging them in teaching practices that are anchored in the realities of young people, especially in content area of science where students of color have traditionally been marginalized. This study is not intended to overshadow or disregard the work of HHBE scholars, but to serve as an extension of HHBE research to arm educators with practical and tangible pedagogical tools to support efforts to be culturally relevant while teaching to the realities of their students.

We define Hip-Hop pedagogy as a way of authentically and practically incorporating the creative elements of Hip-Hop into teaching, and inviting students to have a connection with the content while meeting them on their cultural turf by teaching to, and through their realities and experiences. Emdin (2010) calls for a teaching approach "which involves a process of learning and or utilizing the complex nuances of communication in hip-hop and a valuing of student culture" (p. 62). In this paper, we challenge urban educators - in particular science educators- to focus on the culture of students by using Hip-Hop pedagogical approaches that resonate with the realities of their students.

In this paper, we explore the benefits of two Hip-Hop pedagogical approaches, co-teaching and call-and-response, used in an urban science classroom. Although co-teaching and call-and-response can be identified more broadly as culturally relevant teaching approaches, the added value with identifying them as Hip-Hop pedagogical approaches in this study is that these approaches are anchored by the creative elements of Hip-Hop. These include but are not limited to graffiti art, MCing, Bboying (break dancing), DJing and knowledge of self. In addition, implementation of these pedagogical approaches involve the process of learning and or utilizing the complex nuances of communication in hip-hop, which shows a valuing of student culture and allows for the creation of "weak ties" between the students and science content (Burt, 2001). There are links between individuals and groups within every social network that are categorized as strong ties or weak ties. Strong ties correspond to the links or connections individuals or groups who are "friends" have a lot in common. On the other hand, weak ties correspond to "acquaintances" who do not have much in common that would normally connect them (Easley & Kleinberg, 2010). Hip-Hop practices that are enacted in an urban classroom act as "weak ties"

that can be developed over time into strong ties between students who identify as Hip-Hop and the science content.

Conceptual Framework

This study is rooted in a sociocultural framework that explores the concepts of culture and social capital as they relate to the experiences of African- American and Latino/a urban students in a science classroom. Vygotsky states that "human activities take place in cultural context, [and] are mediated by language" (John-Steiner & Mahn, 1996, p. 191). Most urban students' experiences outside of school are rooted in Hip-Hop culture (Emdin, 2010). The ways urban students dress, the ways they talk, the ways they dance and other non-verbal forms of communication are all rooted in Hip-Hop culture. We suggest bringing Hip-Hop culture into urban classrooms and not only incorporating it into curricula, but also incorporating the culture into the ways in which teachers teach their students. Normally, learners depend on others with more experience to teach them in a way that will make them feel comfortable with the content. If students are engaged and excited about science content in the classroom, and their exchanges around the content are occurring with the use of hip-hop forms of communication, over time, students they take on increasing responsibility for their own learning (Lave & Wenger, 1991; John-Steiner & Mahn, 1996). Being culturally relevant through Hip-Hop pedagogy will not only allow students to view themselves and a culture which they value as a part of the classroom, but it can also encourage independent self education of science content; since students will take increasing responsibility of their own learning (Ladson-Billings, 1995).

For this study, I also draw insight from sociologist Bourdieu (1986) who describes capital and its varied forms as necessary for articulating the ways that humans exist in a social world. In particular, I focus on the form of capital that is acquired in social fields like classrooms when individuals develop a conscious or unconscious personal investment in an activity or process. This form of capital is called "cultural capital" and in its embodied state, is both inherited and acquired as one engages with either new or familiar tools in an activity. In other words, one may possess forms of cultural capital outside of the classroom, and then use these forms of capital to acquire new forms of knowledge in the classroom. The goal is for science educators to create contexts that generate new forms of cultural capital that will eventually lead to the acquisition of science content knowledge. If students develop more opportunities to expand their cultural capital within their science classrooms, they will not only be more prepared to navigate science spaces outside of the science classroom, but they will also be more comfortable while navigating these spaces. Hip-hop is a form of cultural capital that many urban youth possess. When brought into science classrooms, and used as a viable form of knowledge acquisition in science, it can be used to expand youth cultural capital to include science. Students who develop more cultural capital within the science classroom may be more likely to take on a science identity because both Hip-Hop and the teaching approaches being employed in the classroom are connected to their lived experiences. In this type of scenario, students are accumulating and exchanging cultural capital both in hip-hop spaces outside of the classroom and within the classroom. Bourdieu describes cultural capital as having an unconscious and non-deliberate quality in terms of how the individual generates it. However, he also describes cultural capital as something gained as the result of "conditions of acquisition." I suggest that science classrooms that allow and welcome the expression of hip-hop culture are the ideal spaces for the "conditions of acquisition" for urban youth who identify as hip-hop.

This study provides new insight on how Hip-Hop can be implemented in educational spaces with the goal of supporting students' learning, engagement and agency in science. As mentioned earlier, many researchers have revealed the benefits of incorporating Hip-Hop in education, but mainly focus on English classroom settings. For example, Morrell and Duncan-Andrade (2002), discuss using Hip-Hop to promote youth literacy in an English classroom. In their study students developed written and oral debate skills, learned how to critically critique Hip-Hop songs and poems and created and presented formal presentation based on their critiques. This paper provides insight on how Hip-Hop can be incorporated into teaching and how an educator interacts with students in a science classroom, as opposed to an English classroom.

Research Questions

1. How are Hip-Hop pedagogical approaches (co-teaching and call-and-response) beneficial in an urban middle school science classroom?
2. How do Hip-Hop pedagogical approaches support urban students learning of science content?

Methodology

Setting and Participants

The primary site of this study is a 6th grade science classroom in a public urban middle school located in the most densely populated city in the northeast region of the United States. The school is located a few miles from the affluence of a large economic hub, yet streets away from areas of extreme poverty. The school enrolls 486 students in grades 6 – 8. The ethnic break down of the school is described on the school's website as follows: 68% African American, 26% Latino/a, 3% Asian and 2% White. The school is a Title 1 school and all students qualify for free or reduced lunch. Students are from urban communities of extreme poverty populated by people of color.

Intervention with Hip-Hop Pedagogical Approaches

Principal Investigator. The first author of this paper acted as the principal investigator of this study and enacted the Hip-Hop pedagogical approaches in the middle school science classroom in his role as classroom teacher. Both authors served as researchers and took field notes based on observations of students and their reactions to the specific pedagogical approaches implemented. The researchers identified moments that had evidence of student participation /engagement, and moments where students self-identified as scientists.

Co-Teaching. Co-teaching is a teaching approach, most commonly used in secondary education, which has been popular for decades. Co-teaching is defined as "two or more professionals delivering substantive instruction to a group of students with diverse learning needs" (Cook & Friend, 1995, p.25). The goal for implementing this approach in a classroom is to allow the responsibilities for instruction to be shared between the two professionals. In this study, the student is identified as a professional and expert in the science classroom. As the

responsibilities for instruction are shared between both the teacher who is normally viewed as the main authority figure of the classroom and a student, the student feels a sense of empowerment and excitement that can allow them to take responsibility for their own learning and participation to enhance their science content knowledge (Lave & Wenger, 1991; John-Steiner & Mahn, 1996). In Hip-Hop when a Master of Ceremonies (MC) is performing to an audience, oftentimes that MC is accompanied by a fellow MC whose essential role is to be a professional in terms of knowing and understanding the musical content to provide support to successfully showcase meaningful performance for the audience. Co-teaching increases instructional options, provides students with the opportunity showcase their mastery of the content as they support their colleagues to gain that same mastery. In addition, co-teaching in itself is a culturally relevant approach in the sense that the student who is now deemed the professional is a part of the same population that is receiving the instruction. In this study, co-teaching was supported using the following steps:

Before class:
- A student who volunteered to be a co-teacher is given a lesson plan to review for homework in preparation to teach the class the following day.
- The teacher performed a quick review of the lesson plan with the co-teacher to ensure that content is reflected accurately.
- The student was responsible for enhancing that lesson plan so that it can reflect their "teaching style."

During class:
- The teacher sits in a student's seat in a place that is prominent in the classroom and in the view of the co-teacher.
- The teacher pays close attention to parts of the lesson where the content delivered and guides the instruction (by raising a hand as a traditional student would) only when there are issues with the content (Emdin, 2011).

Call-and-response. Smitherman (1977) defines call-and-response as "spontaneous verbal and non-verbal interaction between speaker and listener in which all of the statements ('calls') are punctuated by expressions ('responses') from the listener" (p. 104). Responses from the audience can follow from a speaker specifically requesting them, or they can be unsolicited and spontaneously interjected into the ongoing interaction (Foster, 1989). Call-and-response is a popular teacher approach and is commonly used in music and dance produced by African-Americans. Several studies show call-and-response to be effective in teaching students in urban communities (Foster, 2002; Piestrup, 1973). Call and response is considered integral to communicative behavior and functions as an expression of identity and as a means of conveying cognitive information among African Americans (Cazden, 1988). In Hip-Hop, to engage the audience, the MC will use call-and-response during their performance as a way for audience members to have an opportunity to be active participants during the performance. This exchange between the MC and the audience generates high energy and allows every audience member to participate in the exchange. In this study, call-and-response is used to review and reinforce science content information, as a classroom management tool and to generate positive emotional energy among students. In this study, call-and-response was supported in the following way:

Classroom management: To gain the attention of students when necessary.
>   Teacher: If you can hear my voice clap once
>   Students (*in unison*): [Clap]
>   Teacher: If you can hear my voice clap twice
>   Students (*in unison*): [Clap] [Clap]
>   Teacher: No music
>   Students (*in unison*): [Clap]…[Clap] [Clap]…[Clap]

The clapping rhythm used in this call and response pattern originated from a classic Hip-Hop dance song entitled "No Music" by a Harlem rapper named Voice of Harlem.

Data Collection

The primary data sources for this study were student focus groups, video vignettes and a likert scale questionnaire. Secondary data sources are participant observations and field notes. All focus groups were video recorded and transcribed in their entirety, and reflective field notes were taken during and after each focus group. Videotaping of 6th grade science classes throughout the data collection period provided another means of making observations. Observations and field notes taken during and after each class respectively provided another source of data through which the researchers coded and analyzed for reoccurring themes. Focus group interviews were conducted with participants about their past experiences in science courses, and their conceptions of how the different teaching approaches that the principal researcher uses in the classroom engages them in the sciences.

Questionnaire. All students participating in the study completed a questionnaire to gain information about their perspective on Hip-Hop culture and the use of Hip-Hop incorporated into instruction. The goal of the questionnaire was to provide information that concluded or refuted whether or not participants in the study identify as students of the Hip-Hop generation and if they enjoy Hip-Hop pedagogical approaches. The questionnaire was composed of five-point Likert scale questions (using a scale of 1 – 5, where 1 = strongly disagree and 5 = strongly agree), but also allowing participants to elaborate on their choice of their selection on the Likert scale for every question.

Focus Groups. Focus groups of 2-5 students were formed with participants selected based on responses from the questionnaire. The goal of the focus groups was to understand student's perceptions and opinions of the different Hip-Hop teaching approaches that are implemented in the classroom. There was a focus group of students for each of the two Hip-Hop pedagogical approaches that this study focuses on.

Video Taped Recordings/Video Vignettes. Participants were recorded during classes when the principal investigator enacted Hip-Hop pedagogical approaches. These recordings gave researchers an in-depth understanding of what Hip-Hop pedagogical approaches impacted participants in different ways and the nature of, and exact moment these approaches were implemented. The video recordings allowed researchers to rewind, fast forward and analyze the classroom frame by frame.

Data Analysis Methods

A variety of data analysis strategies were used to efficiently and effectively analyze data collected during this study. Observations and field notes produced in the natural setting of this

study were coded and used as a guide to select video vignettes that showed students interacting with the two Hip-Hop pedagogical teaching approaches being studied. Focus group interviews were transcribed, as were open-ended answers from the questionnaire.

Qualitative coding techniques, including member checking and coding for reoccurring themes were used to analyze the data generated from this study (Guba & Lincoln 1989; Creswell, 2013). All focus group, questionnaire and observation data were entered into a Word document for word-by-word coding and initial coding for categories. Then, the data that was selected for categories was entered into Nvivo to organize and then combine into reoccurring themes. The three themes that emerged from data analysis were (1) using Hip-Hop to support students' understanding of science content, (2) supporting students' agency and voice through Hip-Hop pedagogical approaches, and (3) students' connection to Hip-Hop and Hip-Hop pedagogical approaches.

Results and Findings

The findings of this study are organized by reoccurring themes that emerged during the data analysis process. To elaborate on reoccurring themes, exemplary moments from transcripts that reflect students who participated in this study individually and collectively would provide insight on student's experiences with Hip-Hop pedagogy and in turn the benefits of these teaching approaches.

Call-and-Response Supporting Students' Understanding of Science Content

In the middle school science classroom that was the focus of this study, all students participated in, and were engaged by, the call-and-response approach when it was enacted. Oftentimes, it took up to three "call" prompts to receive a response from the entire class, but students found that this approach was an effective way for students to remember and memorize scientific content taught during its use. Call-and-response was used to reinforce definitions of basic scientific words like force and energy. Naomi, a student who participated in the call-and-response and focus groups thought that call-and response approach was beneficial to student learning "[because the teacher is] jamming [the content] into our head without jamming it into our heads." The student here was referring to the colloquial definition of the word jamming that connotes music and dance as a metho to get her to remember information without jamming (forcing) the information.

Another student, Sean agreed, by stating, "saying it over and over they (students) will be listening and they will get it." Sean felt that when the teacher enacted call-and-response around science content all students in the class would listen and eventually not only join in by participating, they will have a better understanding of the content. Naomi later said, "You keep repeating it until [students] can understand and catch on." Similar to Sean, Naomi felt that the more call-and-response was enacted around science content the more participation there would be from students. Therefore, we suggest that students would gain a better understanding the science content through rhythmic call- and-response interactions with the teacher and entire class. Both Naomi and Sean felt that this was an effective and interactive way of learning in the science classroom.

Interviewer: So when I do call-and-response either if I'm asking you to respond

with definitions or with clapping, does that make you more attentive in the
classroom?
Sean: Yeah, I think that it like gets us more hype to do the work.

Sean explains how the call-and-response approach not only garners student's attention in the classroom, but it also makes students "hype," which means it makes students excited and eager to engage in the science content, activity or lab that might be next on the agenda for the lesson.

Overall, students who participated in this study explained how the use of this Hip-Hop pedagogical approach in the science classroom helps engages them in, and deepen their understanding of, the science content.

Co-Teaching Supporting Students' Agency and Voice

The second theme that emerged from this study was how the implementation of Hip-Hop pedagogical approaches supported students' agency and voice in the science classroom. Both students who had an opportunity to co-teach enjoyed their time teaching the class because they were able to influence what and how students, including themselves, learned in the classroom. They were able to interact with students differently than the teacher to foster students' understanding of the content. Courtney said, "[co-teaching] was great because I felt in charge, I felt like I had control over what the kids were learning and what I was learning." She later went on to explain how it is beneficial for students to learn from their peers because, "it is like us helping us... we have conditions that we can understand, like the way I was teaching…[the teacher] explains things but is not putting anything into it, and sometimes we would get confused." Courtney enjoyed the feeling of being "in-charge" when she co-taught the class and had control over what her peers were learning and how they learned it. She saw benefits in students teaching other students because they are able to explain the content in ways where the content can be transferred from student to student because they understand one another realities and "conditions." Courtney felt that it was more beneficial for students to learn from one another than for the teacher to disseminate the information because students "do not always understand the content when the science teacher teaches it."

Brandon shared similar sentiments to Courtney, but focused more on acquiring the trust of his peers and developing the skill to talk to a large number of his peers. He said, "because I'm in front of all of these people it seems like [they] trust me and chose me to do something smart." Brandon felt that since his peers were engaged while he co-taught, they trusted him to teach them science content. Brandon then says, "[co-teaching] helps me because when I was teaching in front of [of the class], because I was talking slow, and I got to stand in front of people and talk." While Brandon was very timid when in front his peers teaching science content, he viewed co-teaching as an opportunity for him to develop his voice in the science classroom. Brandon is normally a quiet student that often participates, but often feels like he has no voice in the science classroom because as he stated, "my partner doesn't like to talk to me." Brandon was excited for the opportunity to be in a position of power to develop his voice and public speaking skills in the science classroom, while co-teaching.

Students' Connection to Hip-Hop and Hip-Hop Pedagogical Approaches

The third theme that emerged from this study was students' connection to Hip-Hop and

the Hip-Hop pedagogical approaches implemented in the science classroom. Students who answered the Likert questionnaire expressed their connection to Hip-Hop culture and how they would like to see more of it in the science classroom. Out of the 31 students who completed the questionnaire, when students were asked if they enjoyed and listened to Hip-Hop music 81% strongly agreed, 13% agreed, and 7% neither agreed nor disagreed (Table 1). Some short answer responses included:

> Student 1: Because I love Hip-Hop
> Student 2: I love it
> Student 3: Because that is my culture
> Student 4: Because of the beat and what they say connect to me sometime

Table 1
Student responses to likert scale questionnaire

Question		Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly Agree
Q1. I enjoy science	#	0	2	9	9	11
	%	0%	8%	29%	29%	34%
Q2. I enjoy this science class	#	0	2	9	11	9
	%	0%	7%	29%	34%	29%
Q3. I enjoy that my teacher uses Hip-Hop culture to teach me	#	0	1	4	12	14
	%	0%	3%	13%	39%	45%
Q4. I enjoy and listen to Hip-Hop music	#	0	0	2	4	25
	%	0%	0%	7%	13%	81%
Q5. I would like to see more Hip-Hop culture inside the classroom	#	0	2	0	5	24
	%	0%	7%	0%	16%	77%

These responses show that students in this urban science classroom are active participants of the Hip-Hop generation. Students connect to Hip-Hop because they identify it as a part of their culture.

When the call-and-response approach is used for classroom management, students become excited and would wait for the teacher to say "no music," so they can respond and clap with the matching rhythm. Through analyzing the video vignettes, I noticed some students did not respond to the first two prompts (1. if you can hear my voice clap once, 2. if you can hear my voice clap twice), but respond enthusiastically to the "no music prompt" because it allowed them to clap to a rhythm that is tied to their culture and their life outside of school. When asked where the rhythm that students clap to when call-and-response is used for classroom management, students could not identify the popular song entitled "No Music" by Hip-Hop artist Voice of Harlem. Instead students said, "[the rhythm came from the streets, just the streets in general. It didn't necessary come from where I came from... it came from the streets, it came from Harlem, it came from the Bronx, Brooklyn." Students were able to connect the call-and-response approach to their lives outside of school. When students say the rhythm comes from the streets, they are referring to the urban communities where they live and where their school is located. Sean also shared, "I think music in class is cool, not high, but I think it would get everyone to do their work." Sean believes that while students are participating in group work or independent work Hip-Hop music should be played at low volumes to encourage students to do their work, it

is also another way to bring students realties into the classroom, as Sean said "it makes me feel comfortable. It makes me feel at home."

Discussion

Based on the interviews and statements of participants in this study, it became clear that students were overwhelmingly positive about the benefits of Hip-Hop pedagogical approaches in the classroom. These approaches were welcomed because they are rooted in the culture of the students, reflect their realities, and puts the teaching and learning in their own hands. The findings of this study also show that students are able to memorize and then understand science content through both the call-and-response and coteaching approach because it allows them to move from memorization to active participation through the use of culturally rooted approaches to teaching. Students noticed that they are able to relay scientific content to their peers while co-teaching more efficiently than their teacher because they (students) are members of the same community. In many ways, the teacher is an outsider to their culture that needs to create "weak ties" to students that can be fostered by Hip-Hop pedagogical practices (Burt, 2001). While call-and-response may be perceived as just repetition, it has a rich tradition within African communities and takes on a very distinct form within Hip-Hop that gets activated through the enactment of call and response. Within the science classroom, this Hip-Hop pedagogical practice (call and response) awakens a connection between students and the content and creates the conditions for student engagement in science. If students are able to obtain a deeper understanding of the science content and understand the definitions of scientific vocabulary words they increase their science cultural capital and are more likely to navigate spaces where they will need knowledge of science content to thrive (Bourdieu, 1986; Coleman, 1988).

In this study, when a student explained that they had fun while engaging in Hip-Hop pedagogical approaches in the science classroom, I related that to positive emotional energy, which is ultimately beneficial to the learning experience of students and their interactions with one another. Through call-and-response, students are allowed to participate in a positive collective effervescence, which is a sociological construct created by French sociologist Durkheim, where participants in the same community come together, simultaneously communicate the same action, and experience the same social force (Rawls, 2004; Throop & Laughlin, 2002). If teachers are able to create situations that evoke students enacting positive social effervescence in the science classroom, it allows the teacher to further strengthen "weak ties" with students because both the teacher and students become co-participants in the exchange of positive emotions (Burt, 2001; Rawls, 2004).

Through this study, we were able to affirm that students are more excited and engaged when Hip-Hop pedagogical approaches are implemented in their science classrooms, students gain a better understanding of science content through their exposure to Hip-Hop pedagogical practices, students are provided with a different route to develop their voice in the science classroom and are able to share and obtain scientific content knowledge from their peers. Moments like when a student like Brandon expresses how he was nervous speaking in front of a class full of his peers, until co-teaching allowed him the opportunity to practice that skill in a way that connects him to his peers or when Courtney expressed how she was able to explain a concept to her peers because they share the same realities speak to the fact that incorporating Hip- Hop pedagogy in the science classroom allows students to feel at home while within the school walls and feel comfortable with learning science.

Conclusion

The fact that this study positively impacted teaching and learning in an urban science classroom holds tremendous value for urban learning, teaching and research in a subject area where achievement gaps are most prevalent. However, although an urban science classroom served as the setting for this study, we believe that Hip-Hop pedagogy can be beneficial when utilized in any content area. This motivates us to engage in future work that moves beyond the one class that is the focus of this article, and towards comparative studies among classes in different subject areas where Hip-Hop pedagogy is used, not used at all, and/or used sporadically. Other possible next steps for researchers include developing and modifying more teaching approaches and activities that are anchored in the other creative elements of Hip-Hop (such as knowledge of self, storytelling graffiti art and DJing), and longitudinal studies of the impact of Hip-Hop pedagogical practices on students. This article, and the burgeoning area of research that births it, shows that Hip-Hop pedagogy has the potential to transform classrooms and generate new forms of cultural capital for urban students and their teachers. Once Hip-Hop based approaches to teaching and learning that focus on practical aspects of pedagogy become rooted in our practice and research, new opportunities for students are opened, and educators collectively move towards more equitable and transformative experiences for young people.

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