

A New Student Arrives: Opportunities for Mentorship and Social Inclusion with Digital Music Technology

BY NICK JAFFE

Thomas was an 8th grader from Puerto Rico who arrived at the school where I was teaching about six weeks into the school year. In the most recent of several such moves, his mother had moved with him back to Chicago under difficult circumstances. Thomas was angry and later told me that his mother had made what he considered to be promises that he would return to a school in Puerto Rico where he had friends. He felt he'd been misled that morning and tricked into coming to our school. He refused to go to class. He and his mother were sitting in the hallway outside the school office waiting to meet with the Principal to discuss the situation.

I passed mother and son in the hall a number of times between classes. They looked pretty miserable and had been there for close to an hour. I inquired in the office and was given the outlines of the story. I asked Thomas' mother if she minded if Thomas waited in our studio classroom which was nearby. She seemed relieved and gave me an emphatic "Yes," in Spanish. I asked Thomas if he wanted to see our studio, and he reluctantly accompanied me next door. I had just started a 5th grade class, a particularly rowdy bunch, so I didn't have much time to show Thomas around. I asked him if he used computers, and he said that, yes, he'd done



At NKO School—in a project in collaboration with colleague Todd Carter and CAPE—seventh graders freely mix acoustic and digital sources. Students tend to fetishize technology much less than adults and are very musically thoughtful in their choice of tools. They often favor acoustic instruments over sampling and synthesis when both are available and will put in long hours learning a performance skill that they need for a recording.

some gaming. I asked if he liked music and he said yes to that as well. That was all I needed to know. I asked a particularly solitary but very competent 5th grade girl if she would show Thomas how to use a program called Fruity Loops while I got the rest of the class started on their project. Within minutes, Thomas was wearing headphones and was very fixedly working on beats—still looking rather depressed, but definitely working.

Patterns are visualized in Fruity Loops as a series of buttons in a row. These buttons can represent anything from quarter notes to 64th notes, or notes can be played in directly from any MIDI keyboard or other device. But when students start Fruity Loops, they are presented with a two-bar pattern consisting of several rows of 16 buttons. Each button represents an 8th note, and each row of buttons represents a different sound. (The default is a variety of percussion sounds, but there are hundreds of sounds to choose from, from drums to bass, keyboards, vocalizations, etc. With a microphone and appropriate interface a student can also record any sound they wish to be used as a sample in Fruity Loops). A cursor is cycling left to right across the matrix of buttons at a tempo the student can vary. The student can click on a button to turn a sound on for that "beat" or to turn it back off. Very quickly the student is able to create simple or complex polyrhythms.

After about twenty minutes working with the 5th graders I checked in on Thomas. He was experimenting rather frantically with the four sounds that were the defaults, and he had already found (or been shown) the tempo control slider. "Are there other sounds?" he asked. I showed him how to access the extensive library of sampled sounds and how to add them to the pattern, and also how to save a pattern and create a new one. "See if you can come up with four patterns that are very different but will somehow fit together in a song," I said, and then went back to working with the 5th grade class.

From time to time 5th graders would cluster around to see what Thomas was working on, and he'd hand them the headphones to get their reaction to his beats. After another fifteen minutes or so, I went back to Thomas and he played his four patterns for me. They were thoughtfully if conservatively constructed from the same sounds, all percussion, and they ranged from one pattern that was just a straight kick-drum pattern to a highly syncopated, very busy pattern with lots of shakers and snare hits. Class was wrapping up so I asked Thomas if he'd like to stay and keep working through my next class of 7th graders. "Sure," he said. I checked with his mother who was now meeting with the Principal, and she and the Principal had no objection.



A fifth grader's notes from "NKO Records Studios." Note that in this one drawing the student has editorialized about the music business, has represented the molecular and atomic nature of air as a medium for sound, and has illustrated the layering of instrumental parts in a multitrack recording. This drawing was not assigned, but was done casually during a technical discussion.

During the next class I paired Thomas with a very gregarious and capable 7th grade girl who had worked with Fruity Loops quite a bit. She alternated showing Thomas how to combine patterns into a song with telling him all about his future classmates. He seemed to be enjoying himself, so I waited until class was almost over and then checked in to listen to his work. He had a solid four-minute track laid down, still on the conservative side but well-constructed, with evenly spaced break beats and choruses. When we played it back over the speakers, a number of students immediately began experimenting with various rapped lyrics and sung hooks. Thomas looked rather surprised. I suggested to Thomas that it might be a good idea to go to a few academic classes, but I also asked him if my 8th grade class later that day might consider using his beat as the basis for a project. Though he responded with a nonchalant "Sure, whatever," Thomas was obviously pleased and intrigued by this prospect. I said, "Ok we'll see if they want to use it. If they start on something you can come down tomorrow during lunch and have a listen, see what you think, make some suggestions or whatever."

"That's good," he answered and went off to class, seemingly having completely forgotten about his earlier fight with his mother who, after peeking into our classroom, had gone off to work.

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So what had Thomas learned? In just one day, he had learned the basics of operating a sequencing program. He had learned implicitly that a rhythmic pattern can be broken down into beats and that sounds are placed on various beats to create varied degrees of rhythmic complexity and varying rhythmic and melodic motifs. He had learned that often such rhythmic motifs are variations on an underlying pulse, just as melody often revolves around variations on a central theme. He had learned that a piece of music can be conceived as an assembly of such motifs across time. We had not had the time to attach any vocabulary to these concepts, nor had we made them explicit, but the ground was prepared for further explication. Thomas had also actively experienced a number of types of collaboration, from working as a student with me and with other students, to working as a collaborating composer with other students both directly and indirectly. Perhaps most importantly, he had created part of a work of music that was "real" in the sense that it would eventually form a complete whole to be experienced by an audience beyond the classroom.

This was all accomplished with relatively limited teacher intervention because the tools and, more importantly, the context (an open, working studio where creating original music is the point and study a means to this end) were suited to the job at hand. More intervention by teacher and other students would be important in the future primarily to help Thomas develop and refine an individual and collaborative musical and technical "voice" and style. Such intervention would also help Thomas better understand the language and possibilities of his musical work, as well as the technical skills of performance and engineering that would make it more possible for him to deepen and broaden that work. As it was, Thomas went on to be a particularly adept "beat maker," spending class time as well as many lunch hours and study halls working in the studio on his own or with one or two friends to create beats. He never was very intent on expanding his beats into complete works and preferred to specialize and leave that job to others. But he was also very generous with his specialty and seemed to take great pleasure in making beats "to order" for a variety of projects. The range of skills and experiences he acquired in this work should be useful to him in just about any field he chooses to pursue. The music he created certainly was and is useful to us. ¶