

**Project Name**

LOOP: A Project in Creative Instruction for Music Technology [Learn-Operate-Outreach-Perform]

**Principal Investigator** J Tomás Henriques

**Campus** Buffalo State College

**Year of Project** 2013

**Tier** Tier Three

**Overview Summary**

LOOP (Learn, Operate, Outreach, Perform) supports creation of a digital/electronic music lab that will support an online masters program.

**Outcomes Summary**

The [project final report](#) describes key learning outcomes.

**Project Abstract**

The LOOP project aims to create a new model for a music technology facility that allows a comprehensive and innovative approach to learning and experiencing electronic and digital sound and music.

To attain this goal we need to outfit one of our Labs to include fundamental hardware and software tools. These are paramount to allowing the expansion of our course offerings and enable the implementation of our approach to creative teaching.

The expansion of the Lab is further substantiated by our department's move towards offering a major in Digital Music Production, as enrollment in the minor has steadily increased since its launch. Additionally, we are engaged in a partnership with Burchfield Penny Art Center to create an International Digital Music Center.

Our current program offers classes that are designed to steer the students into collaborative projects, including those of an inter-departmental nature. These provide students with learning outcomes that are wide in scope that meet the demands of the marketplace.

Classes cover topics in electronic music composition, sound recording and interactive music with an emphasis in computer programming techniques for sound processing and music performance. The latter inspires students to create music software tools that they can use as performers in our unique Digital Music Ensemble.

The expansion of the Lab will permit the design of new courses covering fundamental concepts in Sound Synthesis, Interactive Sound Design and experimental approaches to Electronic Music Performance.

Additionally, the LOOP project and the outfitted Lab we are planning will contribute to advance the scope and success of current efforts that reach out to other academic institutions and the community. Through the SUNY Learning Commons we are creating a plan that calls for a network of local colleges and universities to engage their music students in using our laboratorial facilities, and get involved in collaborative projects with our students. We strongly believe the LOOP project and the laboratorial facility we are devising will be very successful and can serve as a model for other institutions of higher education to replicate.

We have already reached out to local cultural institutions to organize multidisciplinary events that merge scientific and artistic fields by having our faculty and students actively participate in those events.

We are presently engaged, as well, in co-organizing workshops in digital music with local Audio and Media non-profit institutions, channeling their efforts and networking reach into our college through the use our facilities and offering an opportunity for our students to participate in those workshops.

We have teamed up with local Middle and High schools in a new program to introduce young students to the creative power offered by music technology. This program brings our students to these schools to do “demos of electronic instruments” and also our Digital Music Ensemble to perform electronic music in joint concerts with those schools’ jazz and wind bands.

Students in our program have an opportunity to work with faculty on projects geared at inventing new digital controllers. We plan to add an entrepreneurial component to our program to harvest the quality and potential marketability of the outcomes of our faculty and students’ work. Some of this research has gained international recognition and granted a patent from SUNY Research Foundation.

The Lab we want to outfit is currently comprised of 15 workstations, each equipped with a computer and extensive software applications for music recording, sequencing, composition, and real-time interactive music. Each workstation functions as a powerful, software-based learning unit.

In the LOOP project the workstations will be further equipped with high quality speakers, audio interfaces, microphones, hardware synthesizers and MIDI controllers. Once expanded these workstations will function as independent, dynamic, interactive “musical instruments” as well. This innovative approach turns a Music Lab into an orchestra of digital instruments creating an environment where students can venture into experimentation in real-time sound synthesis, sound processing and the intricate performance of electronic music.

The need to outfit all 15 workstations is justified by the fact that Lab class enrollment is at full capacity for courses such as electronic music composition. Furthermore, having all 15 workstations updated with new gear will enable us to offer workshops, etc to a greater number of students/users, thus optimizing the Lab’s usage.

The LOOP project and its Lab, contribute to our vision of a multi-level solution to teaching electronic music. Again, we believe that the outfitted facility and the courses that it will sustain can become a model to replicate.

## **Reports and Resources**

- [Project final report](#)
- [Outreach and academic activities](#)
- [A brief photographic overview of the project](#)
- [Project outcomes report](#)
- [Mid project report](#)

#### **Connected Learning Models**

- Active Learning

#### **Discipline Specific Pedagogy**

- Humanities

#### **Instructional Design**

- Online Education