

**Josh Burkner**

## **EXPERIENCE**

### **Young Makers Club, Wilton Library** (*February 2016 - May 2016*)

Wilton Library, Wilton, CT

- Facilitate maker projects for ten middle school and high school students, culminating in a maker event.

### **Connecticut LEGO Grant Coordinator, Horizons National** (*January 2016 - present*)

Horizons National, Rochester, NY

- Oversee the disbursement of materials from LEGO grant; facilitate training; create online professional development resources; observe, collect and process data to assess success of the program.

### **Curriculum Development, JoyLabz** (*October 2015 - November 2015*)

JoyLabz <http://joylabz.com>

- Contractual curriculum development for Makey Makey hardware, Scratch, and Beetleblocks programming.

### **Facilitator, Turtle Blocks After School Club** (*October 2015 - present*)

The Bridge Academy, Bridgeport, Connecticut

- Established an after school programming club for middle school students using Turtle Blocks, a block-based Logo environment.
- Facilitated projects that emphasized crafting and progression of design from digital to 3D printed.

### **Creator of Learning and Discovery Experiences** (*August 2015 - September 2015*)

Westport Library, Westport, Connecticut

- Encourage and support patrons with using their creative ideas and technical skills to develop and share interdisciplinary projects.
- Teach staff and patrons new technologies.
- Create experiences connected to the Learning and Discovery Center and work personally and collaboratively with the L&D committee to create more learning opportunities for patrons and staff.
- Develop assessments for some of the activities to determine the success of the program and possible next steps for future programs.
- Work with staff in the Library to create new learning experiences that utilize technology and focus on creative problem solving and design thinking.
- Facilitate interactive hands-on experiences for people of all ages and abilities.
- Contribute towards a broader awareness of participatory learning experiences in the Library through social media, photos, technology, arts and crafts materials, presentations, etc.
- Work cross-functionally to support other departments, as needed.

### **Lower School Coordinator of Academic Technology** (*September 2008 – May 2015*)

Greens Farms Academy, Westport, Connecticut

- Facilitate constructionist projects for pre-Kindergarten through fifth grade students that encourage creative uses of computers, open-ended, hands-on projects, and collaborative skills. Students develop skills in engineering, programming, circuitry, 3D modeling and 3D printing, art, musical instrument construction and music composition, and other skills that encourage them to create using technology.
- One-on-one instruction of faculty for technology skill development and technology integration in curriculum.
- Development of 3D printing curriculum, technical support for middle school and upper school art 3D printing projects. Technical support and consultation for independent study projects involving 3D printed robotics parts, wind turbine parts with high school students.
- Facilitate after school clubs for students in Kindergarten through third grade, including LEGO Club, LEGO WeDo Club, Stop-Motion Animation Club, and Maker Club.
- Documentation of curriculum and student projects through writing and photos on a public Wordpress blog.
- Configuration, imaging, and management of student Mac computers for use by K-12 students. Use of Workgroup Manager for configuration of user environment and Radmind for updates of school-owned computers in lower school. Advanced shell scripting experience.
- Configuration and management of OS X Server for file serving, web and wiki, image deployment, Open Directory, and Radmind.
- Work with a technology team help desk supporting K-12 students, faculty and staff.
- Setup and management of audio and visual equipment for assemblies and presentations.
- Troubleshooting and support of interactive white boards, projectors, and televisions in classrooms and

public spaces.

### **Technology Specialist** (*September 2003-June 2008*)

Lakeridge Elementary School, Mercer Island, WA

- Established Lakeridge Technology Club for students in grades 3-5. Created and delivered curriculum that taught creative use of technology. Facilitated projects including digital photography; a virtual reality walk-through of the school; stop-motion animation; and podcasting. Special emphasis placed on inclusion of girls and students on the Autism Spectrum.
- Management of student, faculty and staff Macintosh computers. Use of Radmind for automating workstation updates, ensuring file system integrity. Use of Workgroup Manager for centralized management of user environment.
- Management of OS X Server for file storage and network application support. Management of nightly server backup of student and faculty data. Support for PC clients using Mac OS X Server for file storage.
- Produced extensive print and online documentation for faculty and students. Provided training on applications, hardware, and procedures for faculty.

### **Systems Engineer** (*January 2001-August 2003*)

Strategic Business Resources, Inc., Renton, WA

- Initial setup and subsequent management, troubleshooting, and support of Macintosh environments ranging from single workstations to multi-department, server-supported installations.
- Integration of Macintoshes into Windows and Novell networks, support for Windows clients using AppleShareIP servers. Support for Macintosh clients using Windows and Novell servers.
- Extensive experience in installation, configuration, and maintenance of AppleShareIP 6.3.3 and Mac OS X Server 10.1.3 for file, web, mail and print services, as well as server hardware.
- Management of assets. Automated the distribution of load sets, secured configured workstations, centralized document storage, and facilitated updates and disk repair.
- Maintaining backup and archiving schedules, scripting backup schedules, and restoration of files and workstations.

### **Technology Specialist** (*August 1998-December 2000*)

Islander Middle School, Mercer Island, WA

## **EDUCATION**

- M.A. Educational Technology, Pepperdine University, Malibu, California, 2007
- Technical Writing: Bellevue Community College, 2006
- UNIX/Linux System Administration Certification, University of Washington Extension, 2005
- B.A. English, Education minor, Colby College, Waterville, Maine, 1995. Phi Beta Kappa, Colby College Beta Chapter, 1995. Graduated Magna Cum Laude.
- Secondary teaching certification in English, State of Maine, 1995

## **PUBLICATIONS**

- Going from Bits to Atoms: Programming in Turtle Blocks JS and Personal Fabrication in Youth Maker Projects, September 2015. <http://www.um.es/ead/red/46/burker.pdf>
- The Invent to Learn Guide to Fun, May 2015. <http://cmkpress.com/fun/>
- How to Make Cardboard Automata, May 2015. <http://makezine.com/projects/make-cardboard-automata/>
- From Digital Design to Clay Tiles. <http://learn.printrobot.com/project/clay-tiles/>
- LEGO Phonograph, July 2013. <http://makezine.com/projects/make-35/lego-phonograph/>

## **PRESENTATIONS**

- Innovative Learning Conference 2008, San Jose, CA: "Scratch Your Students' Programming Itch!" presentation.
- FETC 2009: "LEGO, Stop-Motion Film, and Autism. Collaborate, Create, Have Fun!" presentation.
- CAIS 21st Century Skills Conference, 2010: "VoiceThread: Share Your Images, Share Your Voice!" presentation.
- Scratch Day NYC 2011: "Scratch Meets the Real World: PicoBoards and Scratch" workshop.
- Scratch Day NYC 2012: "WeDo and Pico — All Together Now" workshop with Jaymes Dec and Michael Tempel.
- World Maker Faire NYC, September 2014: MakerEd Panel Discussion facilitated by AnnMarie Thomas.
- Maker-In-Residence, Westport Library MakerSpace, June 2014: Makey Makey Musical Instruments.

- Scratch Day Greenwich Academy 2015: Makey Makey Musical Instruments workshop.
- World Maker Faire NYC, September 2015: Dreamachine exhibition and MakerEd “Making Hard Fun at Home” presentation.
- Scratch Day Foote School, New Haven, CT, April 2016: Makey Makey Interactive Nursery Rhymes workshop.
- Horizons National Conference, Atlanta, GA, April 2016: STEM/Project-Based Learning and Play and Learning presentations.
- Connecticut Library Association Conference, Hartford CT, April 2016: “Constructionist Projects for the Library” presentation and hands-on activities.
- Columbia Teachers College Creative Technologies Symposium #3, New York City, May 2016: “Making Meaning of Angles and Degrees: Art and Programming the LogoTurtle” presentation.

## **CITATIONS**

- Eric Rosenbaum, Explorations in Musical Tinkering <http://web.media.mit.edu/~ericr/papers/rosenbaum-musical-tinkering-dissertation.pdf>
- Invent to Learn: Making, Tinkering, and Engineering in the Classroom, Stager & Martinez, 2013.