Amanda Grutza

amandagrutza@gmail.com ❖ (347)387-2944 ❖ Website: www.amandagrutza.com

Leader in innovation and educational reform for the 21st century with extensive experience in curriculum development, technology integration, and professional development for K-12 and STEM educators. Adept at designing and implementing cutting-edge learning environments, including classrooms makerspaces, and innovation labs, while fostering diversity, equity, and inclusion. Skilled in team management, project management, and promoting social-emotional learning, consistently inspiring students and educators to achieve their full potential.

WORK EXPERIENCE

Portfolio School   **09/2019 – 06/2023**
Director of Innovation   *New York, NY*

- Lead development, implementation, and facilitation of programming and curriculum for project-based learning, experiential curriculum, computational thinking, digital literacy, design education, and digital fabrication.
- Provide professional development opportunities for staff on project-based learning, experiential curriculum, technology use in the classroom, and safety protocols.
- Leader of student experiences, including the development and facilitation of in-house and afterschool clubs and initiatives such as;
  - Leadership, Dungeons, and Dragons, Robotics, and student-led sessions, where students organize and teach one-off workshops about topics they were passionate about.
  - Planning School-wide Unit Kick-offs with High-Impact "Spark" events
  - Leading Weekly Whole School Meetings
  - Mentoring students throughout the school to complete both in-house and community-based initiatives. To date, we have donated over $2000 in student-gathered funds to Ukraine, over $600 to St. Jude's Children's Research Hospital, collected over 50 pairs of pajamas for the children's organization Pajama Program, and are currently collecting cans to create a spring Canstruction, after which the cans will be donated to the Bowery Mission.
- Designed, built, manage and maintain/update school Innovation Lab (cutting-edge makerspace/computer lab hybrid) utilizing 3D printers, laser cutters, CNCs, computers, microcontrollers/robotics & electronics stations, VR equipment, and separate woodworking machine shop
- Supervise maintenance, scheduling/management, and budget for lab machinery: Ultimaker 2, Creality Ender 3 Pro V2, Glowforge Plus, Shapeoko 2, Arduino, Adafruit, Spike Prime, EV3, Oculus / Meta Quest 2
- Implemented work order system for lab fabrication, created and implemented safety protocols and machine maintenance in a collaborative effort with students to instill ownership and responsibility of the lab
- Outreach and collaboration with local industry leaders and institutions to develop community partnerships for students to apply learning and gain real-world experience, includes the United Nations, Arduino, Google, Stuyvesant, First Robotics, NV5, and DNA Learning Lab, amongst others
- FIRST LEGO League Team Coach

STEM Teachers NYC   **09/2020 - Present**
Professional Development Specialist   *New York, NY.*

- Creation/facilitation of professional development programming for teachers from traditional K-12 and STEM backgrounds. Includes educational logistics, online education, Strategic Leadership Training Sessions, and implementing Critical & Visionary Thinking
- Focused on Technology, CAD, and Digital Literacy in the classroom with emphasis on implementation of open-source apps/software into existing curriculum and lessons

- Conducted workshops on Arduino microcontrollers and software (beginner and advanced levels) and collaborated with Arduino and the Arduino Science Journal team

STEM Kids NYC   01/2019 – 08/2021
Curriculum Developer and Facilitator   *New York, NY*
- Provide comprehensive education to students from diverse backgrounds in the NYC area with a focus on the integration of STEM subjects and Culturally Responsive Teaching strategies. Program empowered students with the knowledge and skills necessary to succeed in the 21st-century workforce and reduce risk of poverty, incarceration, and unemployment
- Utilized advanced fabrication tools such as 3D printers and CNCs
- Worked with students in public and charter schools to teach independent critical thinking and problem-solving skills through the engineering design method

ionyc   09/2016 – 05/2020
Professional Development Coordinator & Fab Lab/Makerspace Design   *New York, NY*
- Makerspace creation and consultation for diverse schools, nonprofits, and community centers in the greater New York area. Included strategic crafting of individually tailored space, inventory, curriculum, and implementation based on need, budget, goals, current faculty procedures, and programmatic reports

Girl Scouts of the USA   **Contracting**
Technology / STEM Consultant   *New York, NY*
- Consultant for community service and technology-based projects, including digital media, robotics, social media, and design thinking

CERTIFICATIONS, SKILLS & INTERESTS

Certifications:
- Google: Foundations of Project Management - January 2023 *(Project Management)*
- Ruth Miskin Literacy Inc: Phonics and Literacy - January 2021 *(K-12 Education)*
- Literacy First: Judge & Referee Training - December 2019 *(First Robotics, FRC Assessment, Leadership)*
- Carnegie Mellon University: EV3 Robotics - July 2018 *(Robotics, Engineering, Design)*
- Makerbot: 3D Printing Educator Certification - July 2017 *(CAD, 3D Printing, Additive Manufacturing)*

Skills (In addition to those highlighted above):
- Social-Emotional Learning (SEL)
- Community Engagement
- Cultural competency
- Leadership experience
- Organizational & Project Management
- Collaboration
- Computer-aided design (CAD)
- Critical Thinking
- Patience & Listening
- Engineering & Robotics,
- Building Community partnerships
- Diversity, equity, and inclusion
- Sustainable Practices
- Learner-Centered Practices

Interests:
- Anything that beeps or lights up Breaking things to see how they work
- Synthesizing emotion with logic and tech
- Making things that shouldn't work, *work*
- Graphic Design
- Advocacy
- Passion for helping people and bringing tech accessibility to all!

Projects, Educational Philosophy, and Portfolio

website: