September 2021
Earn PGP's

Making PD Your Way!

A $7000 PD & Resource Program… all for free and on your time

Free PD (STEM/PBL Based)…. Includes Thousands in Materials… Money to Spend Your Way…

Plus… 28 PGP Points and a PD Certificate!

What – Three programs described in the next column with PD, resources, grant money, and PGP points

Who – Educators from any subject or area in 5th – 12th grade applying as a team of three. This can be a department or a cross curricular team. It can also include the media specialist, special area teacher, or technology/computer educator.

When – Programs start October 20th and end March 20. Each involves at least 28 hours of time from each individual over the five months. Most time is asynchronous with about 5 hours being synchronous. The total PD is virtual/online to accommodate your time!

How – Use the link on this paper to apply. Each school is limited to one of the three programs. There will be only five schools (15 educators) in each of the three programs. Teams will be selected from information provided in the application. Selected teams will work together to learn from virtual online PD (most is asynchronous) and provide an online presentation of their accomplishments in March.

Apply Now: Deadline is October 10 with some consideration given to first applicants

Computational Thinking and Micro:bits - Program Description on Page Two (over $7000)

50-60 Micro:bit V2 Computers supplied with interface cables, batteries, and battery holders, 3 resource books for each individual; Micro:bit Starter Kit (0ver $2000)

PD (over $3500) and Cash Grant to school ($1500)

Robotics with Edison - Program Description on Page Three (over $7000)

35-40 Edison Robots with curriculum lessons, batteries, Edcreate Kits, 2 resource books for each individual (Over $2000)

PD (over $3500) and Cash Grant to school ($1500)

Programming/Prosthetics with NeuroMaker Hand - Program Description on Page Four (over $7000)

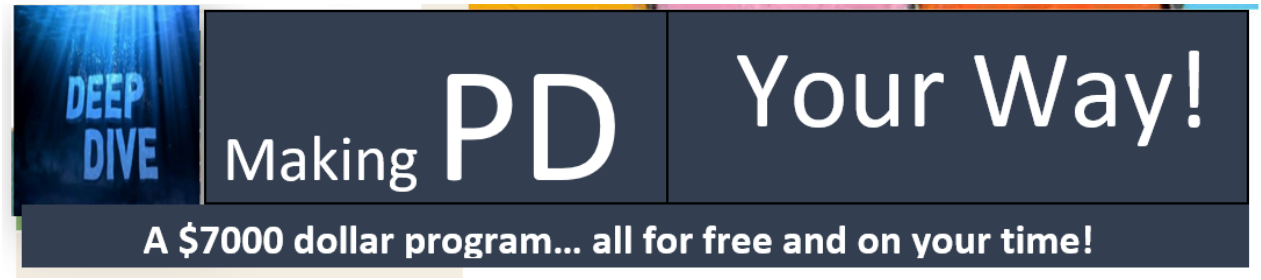
5 BrainCo NeuroMaker Hands and complete curriculum (over $2500)

PD (over 3500) and Cash Grant to school ($1500)

Apply: (Click/ Type Below URL)

https://tinyurl.com/r8deepdive

Sign Up Now: Space Limited



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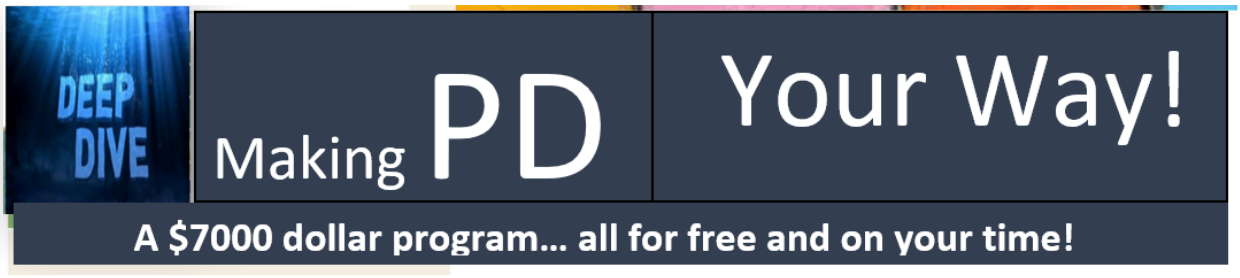
Computational Thinking and Micro:bits

This will be a program that will take teachers into a deep dive of the BBC Micro:bit Technology. The Micro:bit is a pocket-sized computer that introduces students to how software and hardware work together. It has an LED light display, buttons, sensors, and many input/output features that, when programmed, let it interact with students and their world. This unique low-cost computer even provides sound and a microphone for input. Each cohort of teachers will be supplied with 50-60 Micro:bit boards and PD Books for each teacher. It will also include a $1500 mini-grant for each school cohort to build out their program. Global Learning goals are below with more specific goals embedded in the content.

- Help students develop fluency in concepts and languages of computer systems.
- Promote student digital creativity using transdisciplinary ideas.
- Support students in making connections between abstract ideas and real-world outcomes.
- Assist students in seeing how software and hardware work together.
- Facilitate students in designing, building, prototyping, and iterating (the experience of improving a design, as well as making mistakes and learning from them.)
- Promote student vital competencies and career skills in critical thinking, collaboration, creativity, and communication.
- Build students' ability and confidence to have ideas, share them and make them real while connecting to the world of work.
- Provide students opportunities to see and understand the world of computational thinking and develop career awareness for future opportunities in the workplace.



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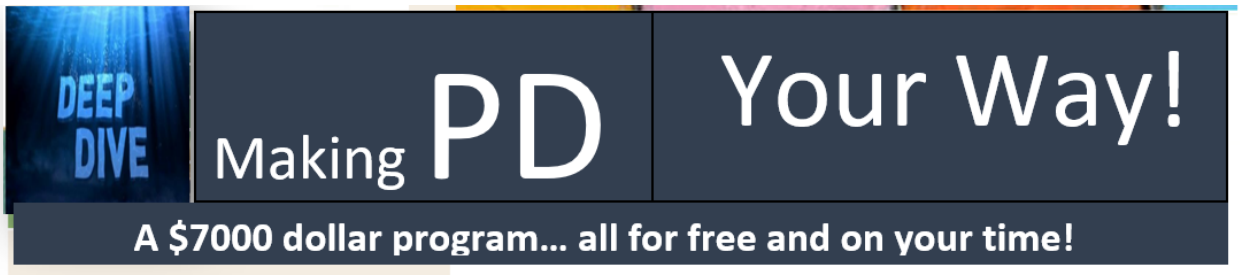
Robotics with Edison

This will be a program that will take teachers into a deep dive of Robotics and Automation using the Edison Robot device and curriculum developed in Australia. Edison is a programmable robot designed to be a complete STEM teaching resource for coding and robotics education for students. The PD will focus on how studying robotics and automation allows students to become more than technicians and coders, but also inventors, problem solvers, and creative thinkers. Teachers will support students as they incorporate these devices, along with sensors and expandable build systems, to open up pathways for learning across math, science, critical thinking, engineering, design thinking and more. Best of all, STEM thinking and career exploration will be included so that students see real connections between their learning and future college and career possibilities. Each cohort of teachers will be provided 40 Edison Robots, 20 expansion kits, and PD books for each teacher. It will also include a $1500 mini-grant for each school cohort to build out their program. Global Learning goals are below with more specific goals embedded in the content.

- Help students develop fluency in concepts, computer languages, automation, and robotics.
- Promote student competency in inventing, design, problem solving, and creative thinking.
- Support students in making connections between abstract ideas and real-world outcomes.
- Assist students in seeing how software and hardware work together in automation.
- Facilitate students in designing, building, prototyping, and iterating (the experience of improving a design, as well as making mistakes and learning from them.)
- Promote student vital competencies and career skills in critical thinking, collaboration, creativity, and communication.
- Build students' ability and confidence to have ideas, share them and make them real while connecting to the world of work.
- Provide students opportunities to see and understand the world of automation and robotics to develop career awareness for future opportunities in the workplace.



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Programming/Prosthetics with NeuroMaker Hand

This will be a program that will take teachers into a deep dive of coding, prosthetics, and robotics for students. Teachers will be introduced to and supplied a set of NeuroMaker HAND(s) derived from real world prosthetics technology. The training on the NeuroMaker HAND will be an introduction to curriculum which is organized into interchangeable modules providing over 50 hours of instructional student content. Teachers will see how they can have students build and code these hands providing connections to real world STEM. Best of all, STEM thinking and career exploration will be included so that students see real connections between their learning and future college and career possibilities. Each cohort of teachers will be provided five $500 NeuroMaker HAND(s) and access to the digital curriculum. It will also include a $1500 mini-grant for each school cohort to build out their program. Global Learning goals are below with more specific goals embedded in the content.

- Help students develop fluency in concepts relating coding and prosthetic engineering.
- Promote student competency in inventing, design, problem solving, and creative thinking.
- Support students in making connections between abstract ideas and real-world outcomes.
- Assist students in seeing how software and hardware work together in automation.
- Facilitate students in designing, building, prototyping, and iterating (the experience of improving a design, as well as making mistakes and learning from them.)
- Promote student vital competencies and career skills in critical thinking, collaboration, creativity, and communication.
- Build students' ability and confidence to have ideas, share them and make them real while connecting to the world of work.
- Provide students opportunities to see and understand the world of medical career awareness and future opportunities in the workplace as it relates to coding and engineering skills.

Below is the information you will be asked to supply in your Google Form application should you wish to prepare your application answers offline before going online to submit or paste in your responses.

Live link to Application - https://tinyurl.com/r8deepdive

This is the electronic application for the Deep Dive Sessions described in the Deep Dive Newsletter. This is open to a school team of 3 teachers of any subject(s) in grades 5 -12 . The team can be the same or multiple grades and the same or multiple subjects. Teams/Schools can apply for one of the Deep Dives, or all three. While schools can apply for all three to better their chance of being selected to participate, no school will be selected for more than 1 Deep Dive. Each Deep Dive amounts to approximately $7000 value with about half being PD and the other half being resources and cash grant. There is no face to face, and all PD is online/virtual with most being asynchronous to accommodate teachers' busy schedules. There will also be 28 PGP points awarded to each teacher along with a Certificate of Completion. Selection of teams will be based on program fit, quality of application, geographic area, grade level, and subject distribution of applicants. Some priority will be given to date of application submission. The application process will be open until October 10, 2021. The online PD will run from October 25, 2021, until March 18, 2022. It will involve about 28 hours of time per teacher over the 5 1/2-month period. Completion of the program will include a collection of artifacts showing student use or materials created, a team journal, a short virtual presentation of accomplishment, and a one-page press release for publication by Region 8. Notification of accepted teams will be provided the week of October 18, 2021.

1. School District
2. School Name
3. Select which Deep Dive
4. Provide three teacher/educator names, subjects, and grades. Keep in mind that the Media Specialist and special area teachers may also be included).
5. Why is the Deep Dive selected a good fit for your team and students?
6. What additional resources can your district or school provide in order to grow this Deep Dive beyond the initial materials and funding. (This can include both existing resources, funds, community, and people).
7. Please include a brief paragraph of each team member's experience and why they are a good fit for this Deep Dive.
8. What excites your team the most about this Deep Dive?
9. Please list an administrator/leader/coach in either your building or district that has the authority to accept and act on the grant. List name and title.
10. Please state that you have read and agreed to the application information under the header at the top of this form.
11. What type of devices are used in your school/district?

In the area below please submit the email of the three team members and the administrator/leader/coach. Each one is a separate line. DO NOT enter names, enter email address only. This is Part 2 of the on-line application.