

Application for Senate Bill 200 Computer Science Education funds (Rural Districts Only)

The following application is to request funds outlined for the instruction of Computer Science Education as prescribed in Senate Bill 200 (section 8.5). The total amount available for rural districts is \$200,000.

Send these application items via email to cchang@doe.nv.gov AND slneudauer@doe.nv.gov
NO LATER than April 30, 2018, by 5:00pm.

Name of school district or list of districts in collaboration: Discovery Charter School

Contact Person(s): Deniece Nohara
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Amount requested: \$15,000.00

In an attached document, please supply a brief narrative on the goals and measurable outcomes of the use of these funds to support computer science education in your district/charter. Please include:

- Overall goal of your project (should include equity and diversity component)
- Professional development plan (include estimated number of educators— teachers, counselors, administrators - to be trained)
- Expected measurable outcomes (include estimated number of students to be reached and the grade levels targeted)
- Proposed technology purchases and how they will expand computer science education specifically
- Next steps: what is your district/charter's overall vision for computer science education?

Overall Goal-

As a school whose mission is to foster, "...student success through community involvement, progressive educational practices, and innovative use of technology.", funds from SB200 will help Discovery Charter School (DCS) continue to implement its mission. With SB200 funds, DCS would purchase two Swivl Robots and one Google Expedition Kit (30 Students). We would also use SB200 funds to offer professional development for teachers. Swivl Robots will enable teachers to record their lessons, self reflect on their teaching, and work with an instructional coach to more effectively facilitate implementation of technology standards. By using video reflection, teachers can improve personalized teaching while creating meaningful, actionable dialogue between other teachers. The use of a Swivl Robot will also allow classrooms to communicate with other classrooms. Google Expeditions will enable teachers to bring students on virtual trips to places like museums, underwater, and outer space. These expeditions will open up a whole new world to the students in the classroom where teachers will be able to

create learning opportunities across the curriculum. Many students at DCS come from low-income families and may have never traveled outside of their community. But with Expeditions, teachers can take these students on trips of a lifetime and make lesson plans more interactive and meaningful.

Professional Development-

DCS plans to provide professional development opportunities for teachers. DCS is a K-8 school, with 21 classroom teachers, 1 counselor, 1 Special Education Teacher and 4 Specialists(P.E., Art, Music, and Technology). We expect 100% of our classroom teachers to receive professional development during scheduled professional development days. Teachers will also have the opportunity to attend paid professional development sessions after their contracted day. During the sessions, teachers will learn how to use the Swivl Robot to record their lessons. Sessions will also introduce teachers to the Google Expeditions kit. Participants will investigate the many Expeditions that are available to integrate with curricular goals and activities. The training will include the exploration of lesson plans to promote collaboration, innovation, and integration strategies for using Expeditions within the classroom to support global learning.

Expected Measurable Outcomes-

We expect to reach 100% of the 477 students in all grades K-8.

Proposed Technology Purchases-

2 Swivl Robots- \$1598.00

Self Reflection is not only important for teachers, but it is also beneficial for students. Using the Swivl Robot, teachers might capture instruction and classroom interactions to analyze and identify areas for growth. Teachers will also use Swivl for Video Based Assessments which are a welcome alternative to paper/pencil tests. To use technology in a dynamic way we have to think outside of the box and change the way we teach. There are so many ways that video can enhance teaching and learning. Swivl makes it easy to connect with other classrooms by placing a tablet into the robot and using dual markers to capture high quality audio. Students will be able to connect with students around the country and world using a Swivl Robot.

1 Google Expedition Kit(30 Students)- \$9369.00

Expedition kits will encourage students to ask more questions and take charge of their learning across the curriculum. Google offers various virtual reality computer science expeditions where students are able to explore computer science topics such as, Coding, Engineering, Robots and more. Students will experience computer science in a completely different way than ever before. Students will have the opportunity to observe, explore, and visualize concepts without having to leave campus.

Professional Development- \$4033.00

134 hours of professional development at \$30/hr. Including, but not limited to prep buyouts for teachers willing to assume a leadership role in technology and computer science at DCS.

Next Steps-

DCS plans to continue to use technology to create artifacts and make meaningful learning experiences for students while working collaboratively and independently to gather and communicate information. DCS will encourage teachers and students to use technology to foster creativity and innovation in computer science education.