STEM Scale Up Program Application
VEX IQ Challenge

Applicant First Name:
Matt

Applicant Last Name:
Ridge

City:
Clarinda

Applicant STEM Region:
Southwest

Applicant Organization/School Building:
Clarinda High School

Applicant Title in Organization/School:
HS Science Teacher

Applicant Organization/School Address:
423 E. Nodaway St. Clarinda, Iowa, 51632 (PO Box 59)

Applicant Organization/School Address 2:

County:
Page

Zip Code:
51632

Applicant Phone Number (with area code): 712-542-5167

Applicant Summer Phone Number (with area code): 712-542-5165

Applicant School/Organization Email: mridgep@gmail.com

Confirm Applicant School/Organization Email: mridgep@gmail.com

Is your shipping address for STEM Scale-Up Program materials and equipment different from above? N

Administrator's First Name: Chris

Administrator's Last Name: Bergman

Administrator's Email: cbergman@clarindacsd.org

Administrator's Phone Number: 515-571-4090

Institution's Fiscal Agent/Business Manager First Name: Colby

Institution's Fiscal Agent/Business Manager Last Name: Pedersen

Institution's Fiscal Agent/Business Manager Email: cpedersen@clarindacsd.org

Institution's Fiscal Agent/Business Manager Phone Number: 712-542-5165

Educators Implementing and Attending Required Professional Development:

Educator 1 Information

First Name:	Matt
Last Name:	Ridge
Email:	mridgep@gmail.com
Position Title:	HS Science Teacher
Grade Level(s):	4, 5, 6, 7, 8, 9, 10, 11, 12

Grade Levels: 4, 5, 6, 7, 8, 9, 10, 11, 12

2. Will this program be implemented in school or out of school or both?
Both

3. How many classrooms, sections or groups will the program be implemented in?
3

4. Estimated number of youth who will participate: 60

5. Based on estimated youth participating, what percentage of youth are on free/reduced lunch? (round to nearest whole number) (please refer to http://reports.educateiowa.gov/ for guidance of free/reduced lunch by Iowa Schools. Any questions about this report, please email them to info@iowastem.org): 40

6. Based on estimated youth participating, what percentage of students impacted will be female? (round to nearest whole number)20

7. Based on estimated youth participating, what percentage of students impacted will be non-white? (round to nearest whole number)10

8. If applying for more than one STEM Scale-Up Program, please rank preference for this program (e.g. 1st of 3, 2nd of 2): Ranking 1 of 1

9. After reading the "What is Required" section of the program's one-pager, describe how you envision fulfilling the expectations of this program in the context of your learning environment, how your plan fulfills the program expectations, and how this program fits your school/organization's long term plans for STEM? (300 word limit):
We plan on fulfilling the expectations by attending the 1/2 day virtual training session and additional training that will help guide the STEM initiative within our district. We will also contact educational support if questions arise during the school year. We will fulfill the role of coach and have an established meeting place. Our school has sufficient technology and support to meet the needs of the VEX program. We will evaluate the program through the STEM Council Scale-Up Educator Survey at the end of the competition season to gauge growth, success, and acquired skills. We are in the process of expanding our STEM initiative within the Clarinda Community School District and this program will ensure that we have access to materials and thereby create access to students while promoting success in our students' ability to compete in the global society. This program will help support NGSS Guidelines and Iowa standards set before us. Lastly, this program will allow us to meet our district's goal of creating Future Ready Iowans and supporting our STEM Best grant.

10. Given that the STEM Scale-Up Program of the Iowa Governor's STEM Advisory Council is intended to "seed" or start programs (not sustain), what are your school/organization's plans to sustain this program in future years in terms of

costs for consumables, licensing, training, leadership advocacy, etc.? (300 word limit):

As science educators, we have a passion and will use our prior experiences in collegiate-level teaching, military experience, and private aviation to expand our students' knowledge. The district will plan on paying future team registrations and travel expenses through the general fund and/or activities fund. We are also eligible to apply for grant funding from the Clarinda Foundation, which supports our district. This commitment to the VEX programming ensures that it will continue in the years to come. Should the need arise, we will also have funds available to replace any broken parts, etc. We plan on advocating for STEM education by sharing with the community through media, competitions, and the display of projects created through this STEM process. We also hope to bring in guest speakers to promote STEM education and show students that everyone can participate in VEX. Due to high student interest and the direction and innovative approach the district is taking, we believe that this program will be sustainable for many years to come.

11. The STEM Council established the priority to reach children of high need and/ or under-representation (specifically ethnic/racial minority, gender distribution, free or reduced lunch, special needs and low STEM test scores). Please describe the barriers in your community which restrict participation of these under-represented groups in STEM programming. How will you address those barriers to involve these subpopulations? (300 word limit):

This program will be offered to all students enrolled in the district, regardless of the barriers the students face. We believe that exposure to these skills is important to all students regardless of their abilities, socioeconomic status, disabilities, sexual identification, sexual orientation, or age. We believe that past experiences have shown us that if we incorporate STEM into the classroom as well as afterschool, we maximize inclusivity for ALL students'. We as educators must be role models in creating a desire within students to know that everyone is capable and can learn through project-based-learning of STEM programming. We also believe that community support of these programs is integral in making this program successful. Community support could include guest speakers from our manufacturing companies within our town that will reinforce that all people can be successful when given the tools to help them create, collaborate, and communicate to solve real-world problems. Students will be excited to see a new program being offered as we begin a new school year. By offering this program, students who may not have an athletic aptitude are able to compete and collaborate with peers in an educational and competitive setting. The word of robotics is seen in everyday life, and this award will allow our students to understand the underlying workings of robotics.

Additional Comments (In this area, please share with us any special circumstances or information specific to your organization that would be pertinent for us to consider):

As we create the Future Ready model of success for our district, we will help our community see that we strive to help students compete in a global society for jobs that may not even exist. Our students may be the future of creating those new jobs. Thank you for allowing this opportunity to get our students ready for opportunities of the future. We have had many students go-through the First Lego League program who are now interested in the VEX program. Many high school students have expressed interest in a robotics program, which we have been unable to offer in the past. The district has recently acquired a large facility in our community where students will be given the opportunity to prepare for the future in a variety of areas, including the STEM fields. We hope to be able to incorporate the VEX program into a larger robotics program.

How did you hear about the Scale-Up program opportunity?
Email from Regional STEM Manager