

Cultural Opportunities for Rural School Districts: Using Robotics as a Successful Example

Thursday 5 August 2021 - Parallel Session 5 – 12.45pm to 1.45pm (GMT+1)

GRANT - Developing Cultural Responsiveness

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How inventive would it be to establish a truly global classroom? A classroom that allows students to learn more about the students from another part of the world, how to better communicate with them in addition to learning the subject curriculum. Most importantly, such a classroom has the potential to break down stereotypes and promote cultural diversity. While this type of classroom can be used to present the curriculum in any subject area (e.g., Fine Arts, Athletics, Science), the use of Robotics is an example that has been taken to heights no one thought possible. Robotics is taught by not only delivering curriculum lectures by the teacher/coach, but by also having students collaborate using higher level thinking skills that go from solving robot design problems to forming an international competition team. Students have participated in summer robotics to start building one robot to compete in the current VEX IQ challenge game. While at camp, students in addition to building a robot experience cultural exploration(Ex. Museum day trip, presenting the program at local Rotary Clubs and an end of camp party). Once camp is over, WeChat text messenger is used to continue this collaboration to finish building the same robot, one in the United States and one in China. Students are exchanging ideas about how to complete the robot. Once complete, these robots are entered in tournaments in The United States and China. If either country's robot qualifies for the VEX IQ World Championship then both countries will join together as one international team for the Championship. This year the United States Robot has qualified for the VEX IQ World Championship Tournament in Louisville KY in late April. An update on the tournament results will be given in the session.