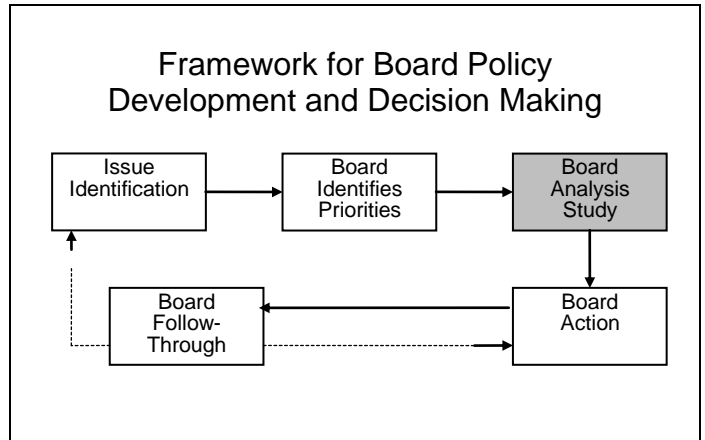


Iowa State Board of Education

Executive Summary

February 11, 2009



Agenda Item: Innovative Programs in Iowa Schools

Iowa Goal: All K-12 students will achieve at a high level.

Individuals will pursue postsecondary education in order to drive economic success.

Equity Impact Statement:

The Department must support the learning of all students if they are expected to achieve at a high level.

Presenter:

Virtual Reality Pilot Project (VRPP)—East Marshall High School

Rex Kozak, High School Principal
Tyler Richard, Senior - 3rd year in VRPP
Brodie Beadle, Senior - 2nd year VRPP
Logan Wolf, Senior - 2nd year VRPP
Trent Harem, Junior - 2nd year VRPP
Jordan Weber, Sophomore - 1st year VRPP
Conner Dilger, Freshman - 1st year VRPP
Jack Harris, Rockwell Collins
Phil Anderson, Mechdyn

School Administration Manager (SAMs)

Carol Lensing, SAMs Manager, School Administrators of Iowa
Paula Vincent, Superintendent, Clear Creek Amana School District
Dan Schaapveld, School Board President
Jody Bandy, School Facilitator
Brad Fox, Middle School Principal
Tom McDonald, High School Principal

Attachments: 1

Recommendation: It is recommended that the State Board listen and discuss the information about the Virtual Reality Pilot Project at East Marshall High School and the School Administration Manager Program (SAMs) in the Clear Creek Amana School District.

Background: **Virtual Reality Pilot Project (VRPP)**

The VRPP gives students an opportunity to put what they learn in the classroom into practice. Students are independent learners and they develop projects that are connected to education and to their own interests. Each quarter, students are expected to partner with a teacher and create something that the teacher can use in the classroom to help students understand a certain concept better. The student in the VRPP also has to create their own project that expands what they already know or learn how to do something new.

Students have to become tech readers and problem solvers in order to be successful in virtual reality. Knowing how to work with a group and ask questions becomes a major part of the learning process. Students are given no directions except a basic program book.

School Administration Manager Project (SAMs)

The SAMs program is an initiative funded through the Wallace Grant. The focus is on having school leaders spend more time supporting and improving instruction and having a SAM deal more with the management responsibilities required from a principal.

**Virtual Reality
Design and Research
East Marshall High School**

This high school Virtual Reality program offers students the opportunity to develop their technical reading skills and computer skills. Students research and design their own virtual programs as well as work with a staff member to create an education program that can be used to enhance an educational concept that is being taught. Students are required to develop at least one new concept every nine weeks and one educational concept every nine weeks.

Students will create work in 2D and 3D imaging and then transfer these images into stereo so the viewer becomes part of the project. This allows the viewer to be able to interact with the projects and make the projects more realistic for today's learners.

The objective of the course is to help students learn how to become technical readers and learn by applying what has been read. Before a student can make use of the Virtual Reality equipment, the student must have a general understanding of what they are expected to do based on the resources provided.

Students have to interview with the counselor and instructor to get into the Virtual Reality program. A student, wishing to be a part of Virtual Reality, must show a willingness and desire to be an independent learner and be willing to work in an environment where self-discipline and maturity are expected. Students will gain experience on working independently and as a team member when solving various road blocks they encounter as they work through the different projects. Students who are accepted into the program are expected to read, research, design, ask questions and answer questions.

Students that are part of the Virtual Reality program will work with different types of programs that allow them to do animation, gaming, and engineering. Resources will be purchased based on the rational and justification of those participating in the program.

Students are expected to be available to do presentations when called upon with little notice and be able to articulate accurately what they have learned from being a part of the program. Students who do not create independent projects or educational projects are removed from the program. Students that do not show responsibility or maturity are also removed from the program. This is a learning opportunity and participants gain study skills, reading skills, and an understanding of the concepts being taught in the core content courses. Students will have a better understanding of the math and sciences because of the programming work that is required to make all aspects of Virtual Reality functional.