# Virtual Reality Educational Pathfinder (VREP) Syllabus & Course Guidance Document

- Adapted with permission from Rex Kozak, Principal of East Marshall High School, LeGrand, Iowa.

#### Why VREP intentionally does not have a "curriculum."

In formal education, a **curriculum** is typically defined as the set of courses, and their content, offered at school. A curriculum is prescriptive, and is based on a more general syllabus which merely specifies what topics must be understood and to what level to achieve a particular grade or standard.

The great systems thinker and iconoclast (An iconoclast is someone who works to challenge and destroy established dogma or conventions) Russell Ackoff once noted, "A curriculum is a solution to a problem that doesn't exist." In essence, Ackoff argued that learning is dynamic and dominated by motivation – those things we enjoy and love we learn without needing a "teacher" or a "curriculum" or a set of courses. Motivated students and adults learn without being taught and they do so by the means they select. (Ackoff, Turning Learing Right Side Up, pg. 10). Formal education in the industrial age needed to organize learning by input and divide it out so it could be automated – thus today we have math courses, science courses, etc. in a prescribed sequence with common names, time lengths, etc.

VREP is intentionally designed to be a disruptive innovation – to openly challenge typical learning archetypes and provide schools with a 21<sup>st</sup> century learning model for their schools. So, why no curriculum? Because we have no real way of knowing how any particular student will use VREP to learn, we are forced (quite happily and willingly) to set and measure student outcomes rather than the material they covered to get to the end of a course. VREP can simultaneously be a math, science, history, art, English, foreign language, research, physical education, and/or industrial technology course – it all depends upon where a student's interest takes them.

#### **VREP Syllabi**

Having no formal curriculum is not analogous to "anything goes." VREP has a very clear and demanding expectation – that students pursue an educationally relevant project that helps them connect, extend, and learn important content and concepts tied to Common Core standards and/or local performance expectations. VREP is concerned with outcomes – did the student demonstrate their learning accurately and completely?

#### **VREP Documentation**

VREP Member schools are expected to meet and maintain some basic documentation requirements that both help Gridley and our students in staying on-target and assists the VREP consortia in building and sharing its library of resources and applications to help

all students learn. Attached documentation provides the basic information required of VREP schools

#### What does a VREP classroom look like?

Since VREP standardizes on outcomes – students producing meaningful and useful 3D/VR projects that extend their learning and the learning of others – it doesn't prescribe inputs. The only requirement is that VREP not be constrained by a formal curriculum, a teacher who "teaches" VR, and other traditional school constraints like time-of-day, etc.

VREP schools are encouraged to experiment with many different inputs and share their successes and failures with the larger VREP community so that we can share and extend learning across the consortia. Some options may include:

- Offering it as a part of the school's course guide as an elective in research, technology, science etc.
- Creating a VREP co-curricular club.
- Working with a local community college to offer college credit for successful VREP projects.
- Creating VREP as an independent study course.

In an effort to provide as many opportunities for students to participate in the VREP program Gridley will be offering an after school club in addition to the elective class offered to 6<sup>th</sup> and 8<sup>th</sup> graders. More information on the meeting day and location will be announced soon.

If you have questions, comments or concerns please feel to contact me at anytime. I love being in the classroom and I look forward to seeing out Gridley students everyday, however this means that if you need to reach me during the day email is the fast way!

Let us clecbrate the beginning of the VREP journey together! Open House for the VREP lab is from 5-6 P.M. August 16<sup>th</sup> 2012. Come and see what a week in the lab can accomplish.

Contact Information:

Mrs. Kist

VREP Lab RM 29 731-4600 lisa.kist@tusd1.org

### Gridley VREP Syllabus

#### Goals:

- to complete a 3D and/or VR project(s) that have personal and educational relevance/importance (Number/complexity of projects based on length of the course/time alloted generally 2 projects per 9 week session)
- to document your learning using the Common Core and/or local Standards and Expectations.
- to connect your project to a specific course or set of courses.
- to effectively demonstrate 21<sup>st</sup> century skills, specifically:
  - o critical thinking and problem solving
  - o collaboration across networks and leading by influence
  - o agility and adaptability
  - o initiative and entrepreneurship
  - o oral and written communication
  - o accessing and analyzing information
  - o curiosity and imagination

#### **Process:**

- Student will work with Mrs. Kist to identify a project and provide:
  - o Tentative project name.
  - o Anticipated subject area(s) involved.
  - o Partnering teacher(s).
- Student will identify the key elements of the project, including but not limited to:
  - o Audience/intent of use
  - Anticipated resources needed (who/where might they call on for guidance and learning? –includes on-site teachers and students, VREP network teachers and students, and on-line and physical resources).
  - Documentation plan how will the student document their learning journey? (Daily logs and journals, on-line blogs, etc.)
  - o Preliminary schedule and plan for completion, including check point conversations and meetings with teacher-of-record.
  - Plan for sharing beyond the walls of the school to industry, community, VREP network, etc.
  - o Acquire appropriate signatures approving the plan.
- Student will document their project to the VREP consortia database and commence project according to the above plan specifications.
- Final project demonstration/presentation.
- Evaluation and final documentation.
- Posting completed project to the VREP consortia site for all consortia students to use and learn from.

## **VREP Proposal Sheet**

<b>Student Name:</b>	Grade:
District/School: TUSD- Gridley	
Tentative Project Title:	
<ul> <li>Describe your project:</li> <li>What will it look like when its done?</li> <li>What will be accomplished?</li> <li>What ideas or concepts will it demonstrate.</li> <li>Who is the audience?</li> </ul>	te or teach others?
What resources do you anticipate using/accessin line/virtual)	g? (Include both local and on-
How do you anticipate the audience or end-users project?	s using and benefiting from this
What academic skills do you believe will be need project? (What courses are you in now or have he to learn from?)	-
What is your timeline and learning plan, includi presentation and evaluation?	ing your anticipated date of the final
How are you going to document your learning as	nd progress?
Who do you need to connect with outside the sch work?	nool walls in order to share this
For Office Use:	
Plan Approved?   Yes No. If no, what need	ds improved/changed?
Posted to VREP website on:	-
Tentative Standards Addressed by this Proposal	l:
Signature and Date of Approval:	