



Professional Development

The professional development component will include five workshops of two hours each. The workshops will be facilitated by SUNRISE Virtual Reality and engaged learning specialists.

Specific workshops will include the following:

1) **Engaged Learning Workshop**

This workshop will introduce teachers to the principles of engaged learning and their applications in the classroom. Teachers learn how to create instruction and present information around the principles and indicators of engaged learning. Case-studies will be given, as well as highly interactive workshops featuring role playing and roundtables.

2) **Virtual reality: The Executive Overview Workshop**

The Executive Overview is the first step in using virtual reality-based learning. It provides teachers with an overview on virtual reality, its components, and its applications. Once the program is completed, participants continue independent learning with reference materials and web site updates.

3) **Curriculum Integration Workshop**

Integrating technology-supported engaged learning into the curriculum is the primary goal of the professional development program. Integrating virtual reality-based engaged learning into a teacher's curriculum plan is a means of improving the learning environment by using virtual reality as another tool to present information, and allowing the student to have experiences that they could not ordinarily have in the classroom.

Teachers will learn the many different ways virtual reality-based engaged learning can be integrated into the curriculum: as a primary resource, as a supplement to classroom learning, or as a student study aid. Teachers will select virtual reality programs to complement existing curriculum plans. In selecting a particular virtual reality program, teachers will understand and identify the learning goals and sub-goals of the program in order to integrate it into their curriculum plan, where they have similar or identical goals specified.

4) **The Virtual Reality Lab Workshop**

Teachers learn how the virtual reality lab is best used as an engaged supplement to existing coursework. For example, the biology class where students are learning cell structure is supplemented by a trip to the virtual reality lab where students enter and explore a human cell. The scheduling

board in the virtual reality lab identifies which virtual reality stations are available and where they are located, ensuring that space is available during the times and days when it is needed. Simple logistical planning will ensure that all classes and programs able to use the virtual reality lab. As most schools have limited computer resources for virtual reality labs, good planning is an important component to making the most of resources.

5) **Learning Facilitators Workshop**

Using virtual reality-based engaged learning in schools greatly eases the burden of teachers, and can be a powerful tool for teachers to keep the attention of students. Teachers become learning facilitators as students explore and learn in virtual reality. As opposed to merely supplying answers, teachers guide students' self-discovery and assist in building ideas. Teachers discover a learning environment where students explore, discover, and make decisions, while teachers assist and guide. Finally, virtual reality-based engaged learning can help ensure that all students have similar experiences to facilitate learning and discussion, further integrating it into the larger curriculum and focusing students on subject matter.