



# Virtual Reality and Standards Alignment

## **Introduction**

SUNRISE virtual reality programs are aligned to national and state standards. Aligning virtual reality learning to standards helps to determine whether or not students are meeting important state standards. Because virtual reality is used as a supplement to existing programs, teachers can check progress in many ways—by observing, questioning, reviewing work assignments, testing or judging projects and performances. Virtual reality learning goals are explicitly stated in supplementary material such as guides, maps, and lists of things to see and do.

The virtual reality learning alignments to standards can provide a “road map” for local and state measures of progress, and an important tool in evaluating the effectiveness of learning strategies, student performance, and virtual reality technology.

## **Alignment**

Virtual reality learning outlines expectations for student learning. This provides a focal point for deciding how to use virtual reality to support education. Because virtual reality learning goals and objectives are stated, the efforts of educators and available funds for teaching and learning can be targeted more effectively to enhance learning. This helps take the guesswork out of decisions about programs, materials, equipment and staff assignments.

## **Virtual reality and Learning Frameworks**

As with standards frameworks, virtual reality-based learning programs are divided into seven learning areas:

- English Language
- Mathematics
- Science
- Social Science
- Physical Development and Health
- Fine Arts
- Foreign Languages (advisory standards)

## **Applications of Learning**

Virtual reality programs are not only aligned to standards, but also to “Applications of Learning.” Learning applications are often specified by state and national standards as vital tools for students to possess, applying them to the seven learning areas. Applications of learning are cross-disciplinary abilities important to student learning.

Applications of learning include:

- 1) Solving Problems
- 2) Communicating
- 3) Using Technology
- 4) Working on Teams
- 5) Making Connections

### **Uses of Virtual reality Standards Alignment**

Virtual reality alignments can be an important organizational influence for lesson plans, test items, scheduling methods, and technology plans. Virtual reality programs are designed to meet specific state curriculum objectives and standards, and be easily integrated into any curriculum. When a subject is being studied, virtual reality is used as a supplement. It educates, clarifies, and reinforces because subject matter now makes immediate sense to students. Programs and tutorials are chosen from a mix of the library of existing virtual reality programs and custom-designed programs made especially for certain subject areas and occupational programs.

Teachers select virtual reality programs to complement existing curriculum plans. In selecting a particular virtual reality program, teachers understand and identify the learning goals and sub-goals of the program to integrate it into their curriculum plan where they have similar or identical goals specified. Virtual reality alignments allow teachers to integrate virtual reality into their curricula while keeping existing assessment tools and administrative frameworks.

Virtual reality learning programs are organized by goals that inform one another and depend upon one another for meaning. Virtual reality learning goals are not as explicitly expressed and delineated- keeping in the spirit of self-motivated engaged learning, interaction with learning goals and objectives with based on individual discovery. Unifying concepts are embedded in the virtual reality program. By allowing students to discover them through self-guided inquiry, the importance of this knowledge and its application is conveyed in an exciting new context.

Supplementary materials are also used to integrate virtual reality into the curriculum, providing a bridge between virtual reality and the traditional classroom. Students can be guided in developing their own skills and attitudes by following and answering supplementary questions provided with virtual reality programs. Supplementary materials such as guides, questions, and lists of things to “see and do” help prepare and focus the student on the content. These materials can also be used to set up “post-virtual reality” discussions in the classroom between students and teachers.

**Virtual Reality learning goals and objectives can be used for a variety of purposes, including:**

- A guide to fit technology-based learning into assessment programs
- A guide to assist schools and teachers with curriculum, instruction and assessments
- A guide to organize and share curriculum, instructional methods and assessments across teachers, grade levels and schools;
- A guide to target the use of funds to better support teaching and learning;
- A means to gauge student progress through local assessments;
- A guide to focus school improvement plans;
- A means to communicate the purpose and results of schooling to the local community.

**Virtual Reality Programs and Alignment**

Learning Goals are broad statements of knowledge and/or skills that organize the subject matter of the learning area.

Learning Objectives are specific statements of knowledge and/or skills within a goal. Taken together, the learning objectives clearly define the learning needed to reach that goal

Learning Goals and Objectives in virtual reality programs are broken down into concrete steps, and are numbered for easy reference. A basic tenet of virtual reality-based learning instructional strategy is that learning can be broken down into small, observable, interactive, and sequential steps with immediate reinforcement, resulting in greater learning. Virtual reality emphasizes application performance because it requires the user to apply the program content to life-like situations in to learn principles and solve problems.

The ordering of content in virtual reality is efficient as possible to help students achieve learning objectives. Sequencing can take place on many levels, including learning, world, and concept-related sequencing. The type of sequencing used is based on both the content being taught and the audience. To the student, sequencing in virtual reality seems obvious as she enters different virtual environments, has different experiences, and manipulates different objects.