

## BEYOND THE CLASSROOM WALLS - VIRTUAL FIELD TRIPS

By

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### ABSTRACT

*There is no doubt that children enjoy field trips. They enjoy the opportunity to explore new places, gaze upon new images and artefacts, and learn about different people, places, and things. Unfortunately, due to financial cutbacks or concerns about security and safety, many children are no longer able to enjoy these adventures. What can teachers do when they happen to face these challenges? How can teachers generate a sense of adventure and discovery when faced with the same four walls each and every day? These are questions that today's technology can help to answer. By creating a Virtual Field Trip, teachers can bring the world into their classrooms. This article will discuss the rationale behind creating these trips as well as offer practical suggestions and ideas for developing the trips, tying them to standards, developing effective strategies for the trips, and assessing the knowledge gained by students as a result of their interaction with the Virtual Field Trips. Student creation of Virtual Field trips, as assessment projects, will also be discussed.*

### INTRODUCTION

There is no doubt that children enjoy field trips. They enjoy the opportunity to explore new places, gaze upon new images and artefacts, and learn about different people, places, and events. Unfortunately, due to financial cutbacks or concerns about security and safety, many children can no longer enjoy these adventures. What can teachers do when faced with the challenges imposed on them by such restrictions? How can teachers generate a sense of adventure and discovery when faced with the same four walls each and every day?

These are questions that today's technology can help to answer. Teachers have access to many materials and websites through the Internet. Students are very adept at computer technologies and can use computers as easily as previous generations used radios and televisions. There is access to thousands of websites and unlimited possibilities to utilize the information and materials found in cyberspace. Why not take this universal access to information and students' innate love of all things technological, and create opportunities for students to learn beyond the classroom walls?

Virtual field trips can be one way that students discover new areas or visit places not easily accessible. First grade teachers in Lubbock, TX designed such a trip (Morris, 2003). The teachers, with the help of parents, designed a

virtual tour to the nation's capital, Washington, D.C. Working together to create a plan, teachers and parents created this virtual tour. Parents and teachers constructed cardboard models of the various monuments, wrote scripts to deliver information about the monuments, and acted as tour guides. The parents even re-configured one of the classrooms to model the interior of an airplane. The results of this project were quite positive and gave students an opportunity to interact with each other as well as the presenters in this virtual mode. While teachers and parents designed this tour within the building, and did not integrate technology, the incorporation of technology into a tour can enhance the experience for the students.

The integration of technology into the classroom can often be a challenge for teachers. The use of *PowerPoint* presentations has assisted teachers in presenting material to students using both lecture and visual materials to enhance the learning. Using technology as a means of exploration, rather than just presentation, takes this integration to the next level. Through the use of digital photos, resource materials, websites, and other accessible web based or paper based information, teachers can create exciting virtual field trips to a variety of places and thus have their students embark on some creative adventures. While there are many websites that now offer virtual field trips to many places (see list of

websites in References), too often, none exist for resources or locations within a specific school community. In addition, some of these ready-made virtual field trips may not be age or grade appropriate in terms of content and readability. Creating virtual field trips allows a teacher to tailor the trip to the needs of the students and offers opportunities for the differentiation of a variety of activities.

## Planning

The first step in the planning process is to decide on the overall purpose of the virtual field trip. As with any planning process, teachers "begin with the end in mind" (Covey, 1989). The major question becomes what teachers want their students to know and be able to do as a result of the experience. What will students gain from the experience? How will teachers assess the knowledge gathered as a result of the field trip? As teachers design the lesson plans and the field trips, they will address all of these questions.

The next step is to plan for addressing the academic standards. Virtual field trips address, at a minimum, four strands of the National Council for Social Studies Standards (NCSS, 1994). These standards include, but are not limited to 1) Culture; 2) People, Places, and Environments; 3) Science, Technology, and Society; and 4) Global Connections. These trips also address the National Educational Technology Standards for Teachers (NETS-T), developed by the International Society for Technology Education (ISTE, 2000). These include, but are not limited to: 1. Technology Operations and Concepts; 2. Planning and Designing Learning Environments and Experiences; 3. Teaching, Learning, and the Curriculum; and 4. Social, Ethical, Legal, and Human Issues.

## Learning Theory

Creating and using virtual field trips in the classroom allows a teacher to focus on some critical theories of learning. These particular theories are constructivist in nature and allow students to construct or discover their own knowledge. Jerome Bruner delineated three modes of learning: enactive, iconic, and symbolic (1966). In the enactive mode, the students are involved in an actual

field trip. They physically visit a museum or historic area. As stated previously, this may not always be possible. The other two modes of learning are addressed in the virtual field trip. The iconic mode focuses on models or pictorial representations of real objects or places. The virtual field trip allows the students to encounter, pictorially, a place that they may never have the opportunity to visit. The symbolic mode deals in symbols or the written word. By interacting with the text in the virtual field trip, the students build knowledge. Incorporating both pictures and text allows students to gain a better understanding of the places that they virtually visit.

In his book, *Frames of Mind* (1983), Howard Gardner defined seven ways of learning or intelligences. These include verbal/linguistic, bodily/kinesthetic, visual/spatial, musical/rhythmic, mathematical/logical, interpersonal, and intra-personal (1983). The virtual field trip can incorporate many of these modes and thus allow teachers to address the various intelligences of their students. For example, the visual/spatial learners' needs are met through the interaction with pictures and various websites. The musical/rhythmic learners' needs are met when music is incorporated into the virtual trip. Verbal/linguistic, interpersonal, and intra-personal students' needs may equally be addressed by having student discussions about the trip as well as allowing students to create individual travel logs or journals.

Since assessment is an important element of any teaching tool or strategy, teachers are free to design the assessment of the knowledge gained through the virtual field trip by creating assessments that address the modes or intelligences described above or by employing traditional methods of assessments such as tests or quizzes. Assessments can include using a Venn diagram to compare and contrast different venues or monuments viewed in the virtual tour, designing a travel brochure to reflect the virtual tour, writing a travel journal or log as students navigate and reflect on the tour, or designing an oral presentation about one aspect of the virtual tour.

## The Technology

While many teachers are reluctant to incorporate

technology into the classroom, the technology applications necessary for creating the virtual field trips are simple applications. The most common technology for creating the virtual field trips is through a simple presentation application such as *PowerPoint*. As teachers create each slide, they are able to scan pictures into the slides, download free graphics from the Internet, and create the text material for the students' appropriate age and reading levels. Slides can proceed in a linear manner with the necessary information contained on the slides. Teachers can also use custom animation, hot spots, and hyperlinks to connect students with additional information either from other files or on specific websites. In this way, students go beyond the linear slides and are able to gather a wealth of information from the World Wide Web. Teachers need to thoroughly check all websites and additional links for appropriateness, factual material, and the students' abilities to comprehend the material. Another application that can be utilized is *Front Page*. As with *PowerPoint*, teachers can use a simple creation of pages or create links to other materials. Teachers with more skill and comfort using technology can create actual web pages and then post them for students. This can be done through basic *html* coding or through a web design program such as *Dreamweaver*. When creating virtual field trips, it is extremely important for teachers to conform to acceptable use policies regarding the use of graphics, texts, images, and other online or text based materials. Teachers need to be aware of the procedures for gaining permission to use copyrighted work. There are some online resources that can be of assistance to teachers in determining appropriate usage (see References).

Whatever the application of choice, the virtual field trip is designed for the student to interact, independently, with the trip itself. Ideally, the student would have the pre-trip materials and the post assessment materials at his/her disposal. The students can work individually, in pairs, or in small groups to interact with the virtual field trip. In this way, students move at their own pace and can spend as little

or as much time as needed for comprehension of the material. Teachers can, of course, utilize the virtual field trip as a whole class presentation and then allow the students to review the material independently.

### Conclusion

While visits to historical or other physical sites provide ideal learning experiences for students, the reality is that this is not always possible. When teachers are willing and able to devote the time and efforts necessary to create virtual field trips, the learning experience can be just as rich and rewarding. Both teachers and students benefit from this use of technology in the classroom. Taking a virtual field trip can, figuratively, take students beyond the classroom walls.

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