

## **Introduction:**

Gilbert's Civilization is an educational unit based on a game called *Civilization IV* by Sid Meier. The sixth grade social studies unit utilizes the game to help demonstrate the Illinois State Learning Standards. The challenge and interactivity increases interest and learning within the classroom.

## **Needs Assessment and Plan:**

Gaming is one of the most popular activities for school age children. Teachers are looking for alternative ways to reach students and to help them remember key concepts in the core subject areas. These two thoughts are merging into a new arena for education. Computer games, for education, have been around since the 1980's, but it has been geared towards the elementary levels. Games today are being modified to appeal to secondary level students and its success is getting noticed by game manufacturers. The unit, for this project, is using a game called Sid Meier's Civilization IV. It has been modified to fit a sixth grade social studies classroom and the unit is aligned to the Illinois State Learning Standards. Using a modern computer game, as a learning tool, it is an exciting way to reach your students.

This unit will specifically address the following:

**Goal 1:** Understand how culture, civics, people, and geography influence a civilization.

**Goal 2:** Students will be able to compare/contrast the civilization they created (in the game) to the civilization that really existed.

**Goal 3:** Knowledge and concepts gained will be placed in long-term memory.

Success on all three goals is important to the teacher and the students. Goal three will be tested and looked at as the core goal for this project.

### **Topic Rationale:**

This unit will help social studies teachers connect an interactive computer game to the Illinois State Learning Standards. This ancient civilizations unit is intended to be delivered at the sixth grade level.

### **Literature Review 1:**

(McMichael, February 2007)

“PC Games and the Teaching of History”

Summary: This article showed that a modern PC game can be used in a history classroom. Planning and setting objectives are essential for using any game. The author was impressed with the interest and cognitive skills that were applied, but warned that PC games are just another tool that teachers can utilize.

## **Literature Review 2:**

(Shaffer, Squire, Halverson, & Gee, 2005)

“Video Games and the Future of Learning”

Summary: Using video games, as a teaching tool, can have a huge impact within the educational world. The authors believe that the future of education will use games, but more research needs to be done. There also needs to be a better connection between the developers and educators. Games are being used that were not meant to be implemented in the schools. Using PC games in the classroom would be much easier if teachers did not have to modify and adapted the games for educational purposes.

## **Literature Review 3:**

(Rice, 2005)

“Video Games in the Classroom? What the Research is Telling Us”

Summary: PC games are very good for problem based learning activities. A major obstacle, for games, is the focus on state learning standards and most games are not designed to connect to these learning objectives. There should be a push for the connection and the author sees this happening in the future. Another interesting point was that games had a positive impact on learning for Attention Deficit Hyperactivity Disorder (ADHD) students.

**Hypothesis:**

Computer games that are interactive, entertaining, challenging, and connected to state learning standards will increase knowledge and store this information into long-term memory.

**Methodology:**

Gilbert's Civilization is divided into four lessons and the assessments. The following is a description of each lesson.

**Pre-Assessment:**

To understand what a student learns throughout a unit, a pre-assessment needs to be administered. The test is given before the unit starts and it will show what the student already knows about the subject matter. Growth in knowledge will be shown when compared to the post-assessments.

**Lesson 1: Introduction to Gilbert's Civilization**

This lesson will introduce the civilizations and themes of the game. Understanding the themes that make a civilization is crucial to understanding the game, but more importantly in understanding how real civilizations thrived and declined. These themes are directly connected to the Illinois State Learning Standards.

## **Lesson 2: Research the Civilizations**

This lesson will guide students to finding facts on the civilization they have been given. Participants will use the game, books, and the internet to find accurate information and place it correctly on their civilization chart. It is important to understand the key terms, but knowing where they fit within the themes and how they were used is vital to this project.

## **Lesson 3: The Game**

A formative assessment will show when the students are ready for the game. Groups will have specific jobs that will need to be completed for each turn of the game. This information will be kept in a journal and used for the compare/contrast project.

## **Lesson 4: Compare and Contrast Civilizations**

Once the game is complete, the students will take their charts and journal and create a PowerPoint presentation. The presentation will compare the historical civilization to the one played in the game. Each group will show their finding to the class.

## **Post-Assessment:**

This assessment is the same as the pre-assessment and it will show if there is growth from the beginning, to the end, of the unit.

### **Four Week Post-Assessment:**

This unit will use a post-assessment four weeks after the unit is complete. Data will be examined to see if the major concepts, from the lessons, are still understood.

### **Participants:**

Gilbert's Civilization is created specifically for a sixth-grade classroom in the state of Illinois. It would not take too much work to adapt the unit to other grade levels and different learning standards. The unit and the game fit very nicely into a social studies classroom.

### **Assessment:**

Assessment should include the following:

1. **Pre-Assessment-** To understand what a student learns throughout a unit, a pre-assessment needs to be administered. The test is given before the unit starts and it will show what the student already knows about the subject matter. Growth in knowledge will be shown when compared to the post-assessments.
2. **Formative Assessments-** Throughout the unit a teacher needs to see if the students understand the information that is being presented. There are many ways to gather this information. Observation, questions, interactive

clickers, and quizzes are a few methods to see what the students know.

Simply, formative assessments are a practice session to see if you will be ready for the game. If the students are not ready, then the teacher needs to adjust to make sure everyone is prepared for the post-test.

3. **Summative Assessment (Post-Assessment)** - If the formative assessments show that the unit goals are being met and the lessons are complete, then the class is ready for the summative assessment. This assessment is the same as the pre-assessment and it will show if there is growth from the beginning, to the end, of the unit. This test should measure each goal that needs to be reached, from the implementation of the lessons.
4. **Continual Assessment**- One of the main goals of Gilbert's Civilization is to have the participants learn the information and to have it stored into long-term memory. This unit will use a post-assessment four weeks after the unit is complete. Data will be examined to see if the major concepts, from the lessons, are still understood.

### **Data Collection Method**

A pre-assessment will be given before the unit begins. A summative assessment will be given at the end of the unit and another summative assessment will be given four weeks later. The assessments will show understanding of Goal 1 and the third assessment will address Goal 3. Goal 2

will be formative assessments which will help the students and the teacher see the progress of learning.

### **Expected Results**

Twelve years of teaching experience have shown me that today's students are learning in different ways than a decade ago. The use of technology, more specifically gaming, has and will have a large impact in schools. Gaming, as a tool in the classroom, will be used because it is an effective way to learn. This project will be successful in helping students gain knowledge, but more importantly this knowledge will be stored in long-term memory.

### **Bibliography**

McMichael, A. (February 2007). PC Games and the Teaching of History. *The History Teacher* , 40 (2), 203-218.

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Shaffer, D. W., Squire, K. R., Halverson, R., & Gee, J. P. (2005). *Video Games and the Future of Learning*. Madison: Wisconsin Center for Education Research.