TEACHER WORK SAMPLE

Feature Lesson

“Making Accommodations for English Language Learners and Infusing Technology into a Lesson”

Block I - General Information

Class: Algebra I
Subject: Factoring Trinomials
Lesson Title: Student Factoring Smart Lesson Creation
Grade Level: 9th
Lesson Length: 1 to 2 - 90 minute class periods

Block II - Purpose

The purpose of this lesson is to use technology in a way that captures student’s interest while reviewing factoring trinomials and vocabulary; it encourages creativity, and utilizes critical thinking skills.

Block III –Objectives

Content Objectives
1. ELLs will become familiar with factoring vocabulary and steps used to factor simple trinomials.
2. ELLs will investigate the steps used in factoring trinomials, page linking, inserting graphing and using smart page tools.
3. ELLS will create a smart lesson involving factoring

Language Objectives
Given an interactive guided lesson, a demonstration, etc., all students will be able to factor simple trinomials.

1. ELLs will use the smart lesson software to create a factoring smart lesson for their peers to work through as a study guide to factoring.
2. ELLs will discuss/list the main steps used to factoring trinomials in their native language.
3. ELLs will translate the main points of the factoring trinomials in English.

Culture Objectives
Given a class discussion on a concept of Factoring Trinomials
1. ELLs will work within a 2-3 person cooperative group setting with other Spanish and/or English speaking students.

**Block IV – State Standards**

**Competency Goal 1**
The learner will perform operations with numbers and expressions to solve problems.

**Objectives**

1.01 Write equivalent forms of algebraic expressions to solve problems.

- a. Apply the laws of exponents.
- b. Operate with polynomials.
- c. Factor polynomials.


**Block V – Teacher Materials**

- Smart Technology Software
- Six different factoring problems for each individual Cooperative.
- Calculators
- Paper
- Pencils
- Internet Access
- Laptops or Desktops
- Access to School Server

**Block VI – Content, Procedures, and Instructional Strategy – Include an explanation of all ELL accommodations that will be used for each activity within the lesson.**

Activity 1 - Review/Demonstration – The teacher creates problems of the day with various smart techniques that reveal the answer to factoring problems in unique ways. Select students are allowed to visit the smart board and by using the techniques they reveal the answer to the daily review problems.

Activity 2 – Assignment/Activity:

1) Cooperative Groups are given six factoring problems to work out. Each group member is responsible for factoring out three trinomials and then they switch problems with their partner to check for errors.
2) Group members discuss any problems that they did not agree upon, thus each trinomial can be reworked together.
3) Group members list the steps that they used in factoring trinomials. ELL students may choose to first list the steps in factoring in their native language then transcribe their list into English.
4) The answers to the factored trinomials are checked by the teacher.
5) Groups are given a Rubric that will be used to check their smart lesson, and given a
change to ask questions regarding that rubric.
5) Students are free to create a smart lesson with the six factoring problems that they have completed, corrected and had checked.

http://www.co-operation.org/

Activity 3 – Conclusion
1) Students are asked to save their work to the school server, classroom laptops or classroom flash drive.
2) Students are given a sticky note and asked to write down one thing that they learned from the day activity and one comment on what they would like to learn more about. Exit notes are place in the 4th period parking lot poster as they exit the classroom for the day.
3) The teacher reviews comments made and plans the daily opener for the next day according to students comments.

Activity 4 – Assessment
Student’s smart lessons will be graded according to the attached rubric. Exceptional Lesson will be place on the server for follow up group activities and review days.

Instructional Technology Used for Teaching and Learning:

In this cooperative group project students create a self-designed smart technology lesson. While linking to the internet, students are allowed to embed images, videos and math gaming websites; this is extremely involved with technology integration. Research has proven that film, video and images can motivate student interest, reinforce student learning, stimulate classroom discussion, and promote critical thinking skills if such tools are used appropriately.

Block VIII – Author Identification

Lesson Author: Holli S. Hudson and Shelley Bryant
School: North Surry High School
Signature: _______________________________________________________
Permission to Publish: _________ Yes ________________ No
<table>
<thead>
<tr>
<th>Category</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buttons and Links Work Correctly</td>
<td>All Buttons and Links Work correctly and Buttons are appropriately labeled.</td>
<td>Most (90% -85%) of the buttons and links work correctly.</td>
<td>Some (84%-70%) of the buttons and links work correctly.</td>
<td>Few (69%-Below) of the buttons and links work correctly</td>
</tr>
<tr>
<td>Background</td>
<td>Background does not detract from the text or other graphics.</td>
<td></td>
<td></td>
<td>Background makes it difficult to see the text or graphics.</td>
</tr>
<tr>
<td>Text –Font Choice</td>
<td>Text is easy to read.</td>
<td>Font is a little hard to read.</td>
<td></td>
<td>Font is difficult to read.</td>
</tr>
<tr>
<td>Math Accuracy</td>
<td>All problems are correct.</td>
<td>One piece of information is incorrect.</td>
<td></td>
<td>Math is confusing or work contains several errors.</td>
</tr>
<tr>
<td>Sequencing of Information</td>
<td>Information is organized in a clear logical way.</td>
<td>Most information is organized in a clear logical way, but one piece is out of place.</td>
<td>Some information is logically sequenced.</td>
<td>There is no organization of information.</td>
</tr>
<tr>
<td>Language (explanation of steps)</td>
<td>Sentences are clear with no grammatical errors.</td>
<td>Most of the sentences are clear but there are 1-2 grammar errors.</td>
<td>Some sentences are clear but there are multiple grammar errors.</td>
<td>There are no clear sentences.</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Project includes all materials needed to gain a comfortable understanding of the topic. It is a highly effective study guide.</td>
<td>Project includes most material needed to gain a comfortable understanding of the material but is lacking or two key elements. It is an adequate study guide.</td>
<td>Project is missing more than two key elements. It would make and incomplete study guide.</td>
<td>Project is lacking several key elements and will make an inaccurate study guide.</td>
</tr>
<tr>
<td>Documentation</td>
<td>Project contains proper documentation of sources.</td>
<td>Most of your sources are properly documented.</td>
<td>Some of your sources are properly documented.</td>
<td>None of your sources are properly documented.</td>
</tr>
<tr>
<td>Cooperation</td>
<td>Works well with others. Assumes a clear role and related responsibilities. Motivates others to do their best.</td>
<td>Works well with others. Shares some responsibility and decisions with others.</td>
<td>Work with others but has difficulty sharing responsibility and decisions with others.</td>
<td>Does not work well in a group setting.</td>
</tr>
</tbody>
</table>

Source: [http://rmiller@regina.pvt.k12.ia.us](http://rmiller@regina.pvt.k12.ia.us) and [http://cuip.uchicago.edu/wit/2000/curriculum](http://cuip.uchicago.edu/wit/2000/curriculum)

Total # points _____________ ÷ 36 = __________%