

# Technology Lessons for the Classroom

*Lesson plans created for teachers...by teachers.*

# Integrated Multimedia

**Texas  
Teacher's  
Edition**

**Volume 3**  
*Grades 8–12*



by Charlotte Haley and René Fuller



*Includes 60 non-software-specific lesson plans that cover essential knowledge and skills for Business Education and Technology Applications classes.*

# Multimedia Madness *Core-curriculum, project-based activities.*

## Integrated Multimedia

**Volume 3** Grades 8–12

**Texas Teacher's Edition**

Covers wide range of technology TEKS. Technology lessons that can be used in core curriculum classes:

- English
- Math
- Science
- Social Studies

Project lessons are learner-centered and encourage students to take responsibility for their own learning as they become engaged in the activities. Each lesson plan includes teacher and student instructions.

### Lessons include:

- Bloom's Taxonomy
- Rubrics that are easy for students to understand
- A wrap-up reflection for students
- Beginner, Intermediate, and Advanced lessons
- Support of PDAS (Professional Development and Appraisal System –Domains I, II, and IV) goals as they incorporate "active, successful student participation in learning"

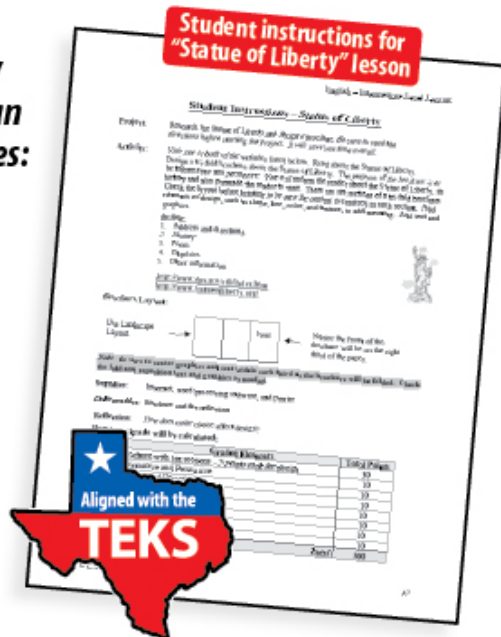
### Features:

- Non-software-specific lesson plans
- Modifications for resource students as well as talented and gifted students
- Suggested grade level for each lesson (8-9 or 10-12)
- Timeframe estimates allow teachers to plan ahead

### Teacher edition resource CD includes:

- Teacher instructions
- Answer keys when applicable
- Teacher resources: examples, solution files, presentations to introduce specific topics, and Web sites
- Copies of all lessons in PDF and Word formats

These creative and innovative lessons are designed to support all core subjects for grades 8–12. The lessons are appropriate for use in core classes as well as a variety of technology classes. Additional teaching resources include examples, presentations to introduce specific topics, photos for editing, and Web sites. Appropriate for a variety of classes, this collection of teaching resources is classroom tested and created by teachers for teachers. **Allows teachers to focus on teaching!**



**Fun, dynamic, time-saving, "Lifesaver" lessons that are ready to use in the classroom.**

### What they're saying...

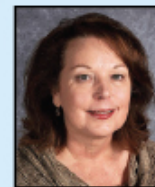
- "I have Integrated Multimedia Volume 1. It is great and I use it every day. There is nothing else out there like it."
- "The effort that has gone into creating lessons that teach what needs to be taught and yet can be enjoyed by students is amazing!"
- "Your lesson plans have taken the stress away and I am really looking forward to teaching this year."
- "I want everything you have created so far. It takes a split second to recognize great teaching materials."



### Renée Fuller Decatur, Texas

Renée Fuller is a CTE Specialist for Decatur High School in Decatur, Texas. She earned a B.B.A. in Management at the

University of North Texas and has been teaching for 18 years. For the last five years, she has presented workshops at local, state, and national conferences and conducted professional development workshops for various school districts.



### Charlotte Haley Bowie, Texas

Charlotte Haley is a Technology Coordinator and a Business

Education/Technology teacher at Gold-Burg ISD in Bowie, Texas. She earned an M.B.A. and an M.A. in Teaching along with a B.B.A. with an emphasis in Finance from Texas Woman's University and has been teaching for 5 years. For the last five years, she has presented workshops at local, state, and national conferences and conducted professional development workshops for various school districts.

### Topics include:

- Book Cover Design
- Virtual Field Trip – Ernest Hemingway
- Writers in Post-Civil War and the Gilded Age
- Literary Terms
- Political Cartoons
- Statue of Liberty Brochure
- Algebra Terms
- Math Formulas
- Space
- Mean, Median, Range, and Mode
- Mortgage Loans
- Hubble Telescope
- Acids and Bases
- DNA Structure
- Earthquakes
- Elements in the Periodic Table
- Nobel Prize in Chemistry
- Podcasting and Scientists
- Abraham Lincoln
- Industrial Revolution
- Rivers of the World
- States and State Quarters
- 1929 – A Year to Remember
- Historical Photographs
- Landmark Cases of the Supreme Court
- Video Interview

### Other available TLC titles:

- Office Applications: Volumes 1, 2, and 3
- Integrated Multimedia: Volumes 1 and 2
- Image Management & Multimedia: Volumes 1, 2, 3, and 4



ISBN 978-1-58912-868-2



TLC Integrated Multimedia – Volume 3 (Texas)



PUBLISHER OF QUALITY EDUCATIONAL PRODUCTS

800.877.0858 • FAX 541.349.0944

P.O. Box 70479 • Eugene, OR 97401

Visit us at [www.toolsforteachers.com](http://www.toolsforteachers.com)

# Table of Contents — Texas Teacher’s Guide

---

<b>Introduction</b> .....	v
---------------------------	---

## **General Information for Using This Book and CD**

What’s On the CD?.....	vi
What Software Is Needed? .....	vi
What Rights Do I Have for Using the Materials?.....	vi

## **All Subject Lessons (*Difficulty Level*)**

Chat Rooms and Blogs ( <i>Beginner</i> ) .....	1
--	---

## **English Lessons (*Difficulty Level*)**

Book Cover Design ( <i>Beginner</i> ) .....	3
Parts of Speech ( <i>Beginner</i> ) .....	5
Virtual Field Trip – Ernest Hemingway ( <i>Beginner</i> ).....	7
Writers in Early America ( <i>Intermediate</i> ).....	11
Writers in a New Nation ( <i>Intermediate</i> ) .....	15
Writers in the Civil War ( <i>Intermediate</i> ) .....	19
Writers in Post-Civil War and the Gilded Age ( <i>Intermediate</i> ).....	23
Writers in the Progressive Era ( <i>Intermediate</i> ).....	27
Writers in the Depression Era ( <i>Intermediate</i> ).....	31
Literary Terms ( <i>Intermediate</i> ) .....	35
Podcast – Interview ( <i>Intermediate</i> ).....	39
Political Cartoons ( <i>Intermediate</i> ).....	41
Résumé for a Poet ( <i>Intermediate</i> ).....	43
Statue of Liberty Brochure ( <i>Intermediate</i> ) .....	45
Guessing Game – Authors and Poets ( <i>Advanced</i> ) .....	49

---

## Mathematics Lessons (*Difficulty Level*)

Algebra Terms ( <i>Beginner</i> ).....	51
Architecture ( <i>Beginner</i> ).....	53
Careers ( <i>Beginner</i> ).....	55
Build a Storage Shed ( <i>Beginner</i> ).....	57
Math Formulas ( <i>Beginner</i> ).....	59
Geometry Terms ( <i>Beginner</i> ).....	61
Mathematicians ( <i>Beginner</i> ).....	63
Space ( <i>Beginner</i> ).....	65
Statistics ( <i>Beginner</i> ).....	67
Tessellations ( <i>Beginner</i> ).....	69
Time Value of Money ( <i>Beginner</i> ).....	71
Mean, Median, Range, and Mode ( <i>Intermediate</i> ).....	75
Calculate Salary ( <i>Intermediate</i> ).....	77
Shapes ( <i>Intermediate</i> ).....	79
Mortgage Loans ( <i>Advanced</i> ).....	81

## Science Lessons (*Difficulty Level*)

Hubble Telescope ( <i>Beginner</i> ).....	85
Model of an Atom ( <i>Beginner</i> ).....	87
Acids and Bases ( <i>Intermediate</i> ).....	89
Atmosphere ( <i>Intermediate</i> ).....	91
Body Systems ( <i>Intermediate</i> ).....	93
DNA Structure ( <i>Intermediate</i> ).....	97
Earthquakes ( <i>Intermediate</i> ).....	101
Elements in the Periodic Table ( <i>Intermediate</i> ).....	103
Energy ( <i>Intermediate</i> ).....	105
Global Warming ( <i>Intermediate</i> ).....	107
Kingdoms ( <i>Intermediate</i> ).....	109
Nobel Prize in Chemistry ( <i>Intermediate</i> ).....	111

Podcasting and Scientists ( <i>Intermediate</i> ).....	113
Rock Cycle ( <i>Intermediate</i> ).....	115
Guessing Game – Scientists ( <i>Advanced</i> ).....	117

**Social Studies Lessons (*Difficulty Level*)**

Abraham Lincoln ( <i>Beginner</i> ).....	119
Great Lakes ( <i>Beginner</i> ).....	121
Industrial Revolution ( <i>Beginner</i> ).....	123
Recruitment Flyer ( <i>Beginner</i> ).....	127
Rivers of the World ( <i>Beginner</i> ).....	129
States and State Quarters ( <i>Beginner</i> ).....	131
1929 – A Year to Remember ( <i>Intermediate</i> ).....	133
Amazing Americans ( <i>Intermediate</i> ).....	135
Are You Smarter? ( <i>Intermediate</i> ).....	137
Historical Photographs ( <i>Intermediate</i> ).....	139
Landmark Cases of the Supreme Court ( <i>Intermediate</i> ).....	141
Panama and Suez Canals ( <i>Intermediate</i> ).....	145
Primary and Secondary Sources ( <i>Intermediate</i> ).....	149
Résumé for a General ( <i>Intermediate</i> ).....	153
Guessing Game – Historical Figures ( <i>Advanced</i> ).....	155
Video Interview ( <i>Advanced</i> ).....	157

<b><i>How To Use This Book (Tips and Benefits)</i></b> .....	159
--	-----

<b><i>General Guidelines for Powerful Presentations</i></b> .....	160
---	-----

<b><i>Chart Correlating Activities with Application Type</i></b> .....	Back of Book
--	--------------

# Activity Comparison

The following pages contain a sample activity from the **Student Project** book and **Teacher's Edition** book.

## **Facts about the Series:**

1. Technology lessons designed to specifically support core subjects/requirements and meet required technology integration goals in core classes.
2. Lessons in this series refer to English, Social Studies, Math, or Science thus supporting national objectives.
3. Lessons can be used in a variety of graphics, image management, multimedia, or desktop publishing classes.

## Student Instructions – Geometry Terms

**Project:** Use the Internet or a textbook to define the following terms. Use drawing tools to create a pictorial representation. *Be sure to read the directions before starting the project. It will save you time overall.*

**Activity:** Use the Internet or a textbook to define the following terms. Use drawing tools to create a pictorial representation. Key the word and the definition and use drawing tools to show the pictorial representation.

1. Line
2. Point
3. Intersection
4. Ray
5. Line segments
6. Endpoint
7. Parallel lines
8. Acute angle
9. Obtuse angle
10. Right angle
11. Complimentary angle
12. Perpendicular lines
13. Degree of angle - 45
14. Degree of angle -90
15. Degree of angle- 120



**Supplies:** Word processing with drawing tools

**Deliverables:** Definitions with drawing and the reflection

**Reflection:** Define the term geometry.

**How your grade will be calculated:**

Graded Elements	Total Points
15 definitions – 3 points each	45
15 drawings – 3 points each	45
Reflection	10
<b>Total</b>	<b>100</b>

## Teacher Instructions – Geometry Terms

**Lesson:** Use the Internet or a textbook and define the following terms. Use drawing tools to create a pictorial representation.

**Activity:** See the student instructions for details.

**Bloom’s:** Knowledge, Comprehension, Application

**TEKS:** § 111.34.C.1.G.6

**TAKS:** **Math Objective 6:** The student will demonstrate an understanding of geometric relationships and spatial reasoning.

**PDAS:** Domain I: Active, Successful Student Participation in the Learning Process  
Domain II: Learner-Centered Instruction

**Grade Level:** 8-9

**Content Area:** Math

**CD Files:** None

**ISTE Standards:** Research and Information Fluency – Students process data and report results.

**Modification:** Special Education: Shorten the assignment to fit the student or give extra time for completion of the assignment.

Gifted/Talented: The word geometry comes from two Greek words. What do they mean? *Answer: Geo = earth and metro = measure.*

**Timeframe:** Allow 1 to 2 days for a 50-minute class or 1 day for a full block.

**Level of Difficulty:** Beginner

**Supplies:** Word processing with drawing tools

**Deliverables:** Definitions with a drawing and the reflection

**Reflection:** Define the term geometry. *Answer: Geometry is the mathematics of the properties, measurement, and relationships of points, lines, angles, surfaces, and solids.*

**Rubric:**

Graded Elements	Total Points
15 definitions – 3 points each	45
15 drawings – 3 points each	45
Reflection	10
<b>Total</b>	<b>100</b>



## Student Instructions – Podcasting and Scientists

**Project:** Interview one of the world’s great scientists and create a podcast. *Be sure to read the directions before starting the project. It will save you time overall.*

**Activity:** Podcasting is a method of recording a radio type show and distributing (publishing) it over the Internet. The term podcasting is a combination of the words iPod and broadcasting. There are video podcasts as well. Podcasting generally has four parts. First, the podcaster creates the podcast, and then publishes it to the Internet. Next subscribers get the podcast and finally listen to the podcast.

Working with a partner in this project, select a scientist and research the world’s great scientists on the Internet. Some examples are:

- Albert Einstein
- Sir Isaac Newton
- Robert Hooke
- Louis Pasteur
- Thomas Alva Edison
- Stephen Hawking
- Alfred Nobel
- Samuel Morse



After choosing a scientist and researching on the Internet, create a page of facts. Be sure to list the country of birth, greatest discovery, and at least five other facts.

In your group, decide who will be the interviewer and who will play the role of the scientist. Create a list of interview questions together. When you are ready to conduct the interview, open the software that you are using to record the podcast. You will need a microphone to simulate a radio show interview. Interview the scientist (your partner). Start recording and then introduce yourself and last, your guest (the scientist). Welcome your listeners and your guest to your radio show. Begin asking the questions in a conversational tone. When you are finished, stop recording, and play back the recording to check your work. The recording will only be a few minutes in length, so you can re-record if needed.

Be sure to have everyone’s permission before you publish the podcast.

**Supplies:** Sound recording software

**Deliverables:** 3 to 5 minute podcast and the reflection

**Reflection:** What is a podcatching client? Search the Internet to find the answer.

**How your grade will be calculated:**

Graded Elements	Total Points
3-5 minute podcast	20
Minimum 7 interview questions plus introduction	70
Reflection	10
<b>Total</b>	<b>100</b>

## Teacher Instructions – Podcasting and Scientists



- Lesson:** Interview one of the world’s great scientists and create a podcast.
- Activity:** See the student instructions for details.
- Bloom’s:** Knowledge, Comprehension, Application, Analysis
- TEKS:** § 112.42.C.3.d
- TAKS:** **Science Objective 1:** The student will demonstrate an understanding of the nature of science.
- PDAS:** Domain I: Active, Successful Student Participation in the Learning Process  
Domain II: Learner-Centered Instruction
- Grade Level:** 10-12
- Content Area:** Science
- CD Files:** None
- ISTE Standards:** Communication and Collaboration – Students interact, collaborate, and publish with peers, experts or others employing a variety of digital environments and media.
- Modification:** Special Education: Have students work in groups.  
Gifted/Talented: Why do you think people create podcasts?  
*Answer: It varies, but many do it for fun, some to get exposure for a business venture, and others use it as advertising.*
- Timeframe:** Allow 2 to 3 days for a 50-minute class or 2 days for a full block.
- Level of Difficulty:** Intermediate
- Supplies:** Sound recording software
- Deliverables:** 3-5 minute podcast and the reflection
- Reflection:** What is a podcatching client?  
*Answer: What is a podcatcher? A podcatcher is the software used to distribute the podcast. The dominant podcatcher is Apple’s iTunes player. Others include Microsoft’s Zune, Mediafly, Juice, and Podracer.*

**Rubric:**

Graded Elements	Total Points
3-5 minute podcast	20
Minimum 7 interview questions plus introduction	70
Reflection	10
<b>Total</b>	<b>100</b>

Chart Correlating Activities to Applications

<b>Application Type</b>	<b>Name of Lesson (Difficulty)</b>	<b>Level</b>	<b>Page</b>
Graphics	Architecture (Beginner)	Mathematics	53
Graphics	Hubble Telescope (Beginner)	Science	85
Graphics	Rock Cycle (Intermediate)	Science	115
Graphics and/or Presentation	Shapes (Intermediate)	Mathematics	79
Graphics and/or Word Processing	Book Cover Design (Beginner)	English	3
Graphics and/or Word Processing	Literary Terms (Intermediate)	English	35
Graphics and/or Word Processing	Energy (Intermediate)	Science	105
Graphics and/or Word Processing	Model of an Atom (Beginner)	Science	87
Graphics and/or Word Processing	Abraham Lincoln (Beginner)	Social Studies	119
Graphics and/or Word Processing	Landmark Cases of the Supreme Court (Intermediate)	Social Studies	141
Internet Calculator	Time Value of Money (Beginner)	Mathematics	71
Photostory	Historical Photographs (Intermediate)	Social Studies	139
Presentation	Writers in Early America (Intermediate)	English	11
Presentation	Writers in a New Nation (Intermediate)	English	15
Presentation	Writers in the Civil War (Intermediate)	English	19
Presentation	Writers in Post-Civil War and the Gilded Age (Int.)	English	23
Presentation	Writers in the Progressive Era (Intermediate)	English	27
Presentation	Writers in the Depression Era (Intermediate)	English	31
Presentation	Guessing Game – Authors and Poets (Advanced)	English	49
Presentation	Virtual Field Trip – Ernest Hemingway (Beginner)	English	7
Presentation	Tessellations (Beginner)	Mathematics	69
Presentation	Atmosphere (Intermediate)	Science	91
Presentation	Body Systems (Intermediate)	Science	93
Presentation	Elements in the Periodic Table (Intermediate)	Science	103
Presentation	Global Warming (Intermediate)	Science	107
Presentation	Guessing Game – Scientists (Advanced)	Science	117
Presentation	1929 – A Year to Remember (Intermediate)	Social Studies	133
Presentation	Great Lakes (Beginner)	Social Studies	121
Presentation	Guessing Game – Historical Figures (Advanced)	Social Studies	155
Presentation	Panama and Suez Canals (Intermediate)	Social Studies	145
Presentation and/or Word Processing	Parts of Speech (Beginner)	English	5
Presentation and/or Word Processing	Careers (Beginner)	Mathematics	55
Presentation and/or Word Processing	Math Formulas (Beginner)	Mathematics	59
Presentation and/or Word Processing	Nobel Prize in Chemistry (Intermediate)	Mathematics	111
Presentation or Photostory	Earthquakes (Intermediate)	Science	101
Presentation or Photostory	Industrial Revolution (Beginner)	Social Studies	123

## Chart Correlating Activities to Applications

Sound Recording	Podcasting and Scientists (Intermediate)	Science	113
Spreadsheet	Mortgage Loans (Advanced)	Mathematics	81
Spreadsheet	Calculate Salary (Intermediate)	Mathematics	77
Spreadsheet and Word Processing	Build a Storage Shed (Beginner)	Mathematics	57
Video and/or Word Processing	Podcast – Interview (Intermediate)	English	39
Video Editing	Video Interview (Advanced)	Social Studies	157
Word Processing	Political Cartoons (Intermediate)	English	41
Word Processing	Résumé for a Poet (Intermediate)	English	43
Word Processing	Statue of Liberty Brochure (Intermediate)	English	45
Word Processing	Algebra Terms (Beginner)	Mathematics	51
Word Processing	Geometry Terms (Beginner)	Mathematics	61
Word Processing	Mathematicians (Beginner)	Mathematics	63
Word Processing	Space (Beginner)	Mathemataics	65
Word Processing	Statistics (Beginner)	Mathematics	67
Word Processing	Mean, Median, Range, and Mode (Intermediate)	Mathematics	75
Word Processing	Acids and Bases (Intermediate)	Science	89
Word Processing	DNA Structure (Intermediate)	Science	97
Word Processing	Kingdoms (Intermediate)	Science	109
Word Processing	Amazing Americans (Intermediate)	Social Studies	135
Word Processing	Are You Smarter? (Intermediate)	Social Studies	137
Word Processing	Primary and Secondary Sources (Intermediate)	Social Studies	149
Word Processing	Recruitment Flyer (Beginner)	Social Studies	127
Word Processing	Résumé for a General (Intermediate)	Social Studies	153
Word Processing	Rivers of the World (Beginner)	Social Studies	129
Word Processing	States and State Quarters (Beginner)	Social Studies	131
Blog/Chat Room	Chat Rooms and Blogs (Beginner)	All Content Areas	1