

The First Grade Teachers Multimedia Group  
@ University of Texas at San Antonio

# Professional Training Manual

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Multimedia Group Project

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The following link is a smaller condensed version of the training for teacher's only:

[Teacher's Training Manual](#) (Web version)

[Teacher's Training Manual](#) (Mobile Version)

## Introduction

This project training manual proposal was developed in conjunction with enrollment in IST 6353 at the University of Texas at San Antonio. This course, Multimedia Development, was designed to help Master's level students learn and develop multimedia rich media and instructional curriculum projects. The class was divided up into teams, and this manual is the work of Jose Raul Alvarez, Theresa Dehoyos, Julie Finlay, April Kelley, and Lauren Steele formed as Group 1.

Our group, The UTSA First grade teachers' multimedia group, focused on building a training system for first grade teachers enrolled in the instructional technology program at UTSA. Some may ask why we chose to plan a program for certified first grade teachers, and what it would entail. We chose to develop this kind of program to enhance teaching and training in the areas of technology integration in public schools. Although the five of us are pursuing different career directions, we all had similar a direction of using our varying expertise to shape how teachers can use technology in the classroom. Because of these experiences, we wanted to help future first grade teachers avoid pitfalls by providing a training program that addresses many of the common questions, and concerns of teachers concerning the use of technology, and why to use technology in the classroom. Also, included in our training program are conceptual lessons that will help out first grade teachers integrate math through gaming.

This manual has been put together in the following path:

Overview of the multimedia experience.

Introducing the reader to the website, multimedia application and Mobile version

Description of the multimedia experience. Rationale, Objectives, and Background Information

Starting to put the training puzzle together – what is it about?

Requirements, Roles/Responsibilities, Evaluation, and Strategy

What do the trainers need to know?

Sources, Constraints, and Resources

What could affect the success of the training?

Environment and Materials

What do we need to make it successful?

Course Outline, Training Log, Updating Materials

It all comes together – what does it look like?

We designed the manual in the above format in order to make the manual follow a natural progression from basic information toward the specifics of the program. Because we have been working with this, we feel that this is the most natural progression of ideas and resources to answer the questions of the trainers. It is our hope that the trainers who read this manual will agree that our format is easy to follow. However, if for some reason it is not, please feel free to adapt the format for your convenience.

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Theresa holds a degree in Computer Information Systems. Her background includes a certification in Technology Application, EC-12. She is currently working on a Master of Education in Instructional Technology. She has experience teaching at the San Antonio Independent School District, and teaching adult learners. She is currently working on a Master of Education in Instructional Technology, and is working as a graduate assistant at UTSA.

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## Acknowledgments

As a team, we would first and foremost like to thank Dr. Timothy Yuen for his hard work, dedication, and support to the development of this IST teaching project. With his encouragement, we developed a plan that we feel is beneficial to the future of first grade teachers entering the workplace.

The final acknowledgments are dedicated to our project team as a whole. April, Jose, Julie, Lauren, Terry, and all feel like we worked well together, as individuals, and as a team. We wish each other the best of luck in future endeavors, – wherever it takes us all. We have truly enjoyed working on this project, and we are proud to hand it over to the staff in the *College of Education and Human Development* to see what wonderful programs and events can come out of our countless hours of meetings, phone calls, brainstorming, and planning.

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## Rationale

When our group first decided to focus on developing an educational and informational website for the integration of Mobile technology into first grade, we didn't have a fully developed rationale in place to defend our ideas. All we had to go on was the fact that the five of us thought that first grade teachers are faced with a new trend in technology integration in public schools. As we started talking, we asked about the possibility doing a math project. We asked "What do kids like in math?" Why do kids like robots? How would you prefer to go about learning that information if you were a student once again? Many of the people close to us also echoed our concerns by saying that they wish there had been some kind of virtual training or information area that answered some of the basic faq's that would capture interest. We also started working on a literature review that would help us about the issues in creating a website based on our assumptions and whether there was a need to integrate technology through gaming using Flash and HTML and more importantly how to make the technology mobile using a Mobile device (iPod).

With the current state of technology integration in schools, what better place to start in the area of first grade, it is apparent that they need some kind of virtual training and/or informational sessions to answer questions concerning technology integration in public school. Today's teachers need to access training more than ever because many teachers work full time, and cannot come to campus during normal business hours and attend day workshops. Our goal is to propose an evening workshop for teachers to attend and receive technology integration lessons. At this point, the workshops would be offered to teachers enrolled in the Instructional Technology courses. Also, workshops would vary depending on the grades targeted to align with TEKS.

## Training Objectives

Steps to creating a Flash website and HTML website

IST group 1 will be able to complete and submit project plan for records at the beginning, middle and end of coursework periods.

Meet with Advisor (Professor Yuen)

Set up group and roles

Talk about Flash concepts and content integration and set up a mock plan

Submit project training manual proposal

Discuss storyboard guidelines

Submit storyboard

Creation of a Mobile unit

Identify function/purpose of website

Review examples of existing websites

Create framework for website

Given standards and website functions, the author will organize their website template so that a reviewer can identify the organizational structure of the website.

Standards

Themes

Questions

Determine media to create website

Given various media and current software skills, the author will determine the media that can be used to create a website that can be easily accessed by K-12 students

Web Page

Flash

Collect assignments and work that correlates to standards

Given the requirements of a website, graduate students will gather, organize and align necessary documentation for to ensure contents of website

Align artifacts/lessons with TEKS standards

Table of contents

Navigation scheme

Supporting documentation/artifacts

Continuous review of content accuracy

Peer Reviews

### Overview

Our product will include a training manual that outlines the design of a web portal specifically designed for first grade teachers. We are currently focusing on students enrolled in the M.A. in Education program with a concentration in Instructional Technology. Ultimately, our goal is that the manual will be utilized to develop a web portal for student use at his or her work environment. Perhaps an online training could be created at UTSA, if other materials can be banked for other grade levels to ease the travel of teachers to the UTSA campuses.

Teachers will learn:

Website Process

First grade teachers-TEKS

Flash

HTML

Creating lessons for technology

Use video/podcasts

Use Mobile unit

Assessment

Evaluation

## Training Needs

Conducting periodic need assessments can give the COEHD administrator and Web Design administrator, the information that they need to make good decisions of how to approach a new student service. With little or no change in the usage of program since installation, administration must be able to weigh the needs of the students against the financial constraints of implementing this new service. Before making a decision to expand an existing program or open a new one, administration must first gauge the true needs within the service area. As a result, a first grade teacher's service-learning group (that's us) has been brought in to market a new service program to the UTSA campus community. The following training manual outlines a training plan, which would recommend the necessary requirements in facilitating a successful technology service for first grade teachers students enrolled in the *College of Education and Human Development*. Moreover, the training plan/manual highlights program and marketing areas of importance for a successful technological integration of workshops for first grade teachers. Administration should consider following areas:

### A. COEHD demographics

COEHD workshops for first grade teachers enrolled in an instructional technology program.

COEHD should have a service-learning committee that is formed from first grade teachers' students, faculty, administration, and web facilitator that can provide assistance in program planning and development before, during, and after.

When making decisions about possible changes or expansion of programs, the administrator should:

- Use data that reflects the training needs of the campus community,
- Create a training plan that has specific, measurable goals and objectives that are reviewed on a regular basis
- Identify areas of strength of the training
- Identify areas where improvements are needed
- Survey students and service-learning members to gauge program perception and whether the program has met student needs or not.
- Usage, Developmental needs, Systems to monitor student progress, Monitoring/Tracking of COEHD students

### B. Training Student Development Specialists /Graduate Assistants

When the decision has been made to implement training workshops for first grade teachers' students, one of the most important decisions in the successful operation of a program must be the training of Student Development Specialists or Graduate Assistants. The development specialist/graduate assistants chosen to work and monitor the training must be able to handle a complex learning environment with students from different backgrounds. Every Student Development Specialist/Graduate Assistant should:

- Use appropriate technology strategies designed for adults
- Have the ability to relate to the students
- Be sensitive to cultural diversity and disabilities
- Have a commitment to his/her own professional development
- Model professional work habits for students
- Prepare materials and strategies before each class session

In many COEHD programs, the student development specialist/graduate assistant has multiple roles and must be comfortable with each of them. Among other things, the Student Development Specialist and Graduate Assistant must be able to:

- Diagnose students' learning problems and identify solutions
- Match materials to students' learning style/preference as well as objectives
- Evaluate student progress and keep students focused on goals
- Counsel students so they remain motivated as they pursue their educational goals
- Maintain accurate and up-to-date records
- Provide one-on-one, small, and large group instruction
- Use technology to enhance student achievement
- Use technology to enhance professional self-growth

### **Training Roles and Responsibilities**

The Development Specialist will be the primary trainer for this program. Graduate Assistants can also facilitate instruction if enrolled in instructional technology coursework. Their roles and responsibilities will include:

- Ensuring that all teachers have registered for course
- Contacting students prior to training to verify attendance.
- Conducting on-going assessments of program.
- Making modifications to program as needed.
- Facilitate additional training if necessary.
- Review success of program and meet with advisors.
- Maintain communication with students after training.
- Establish an online community based on the foundations of this program.

Additionally, Site Administrators at UTSA will support campus training.

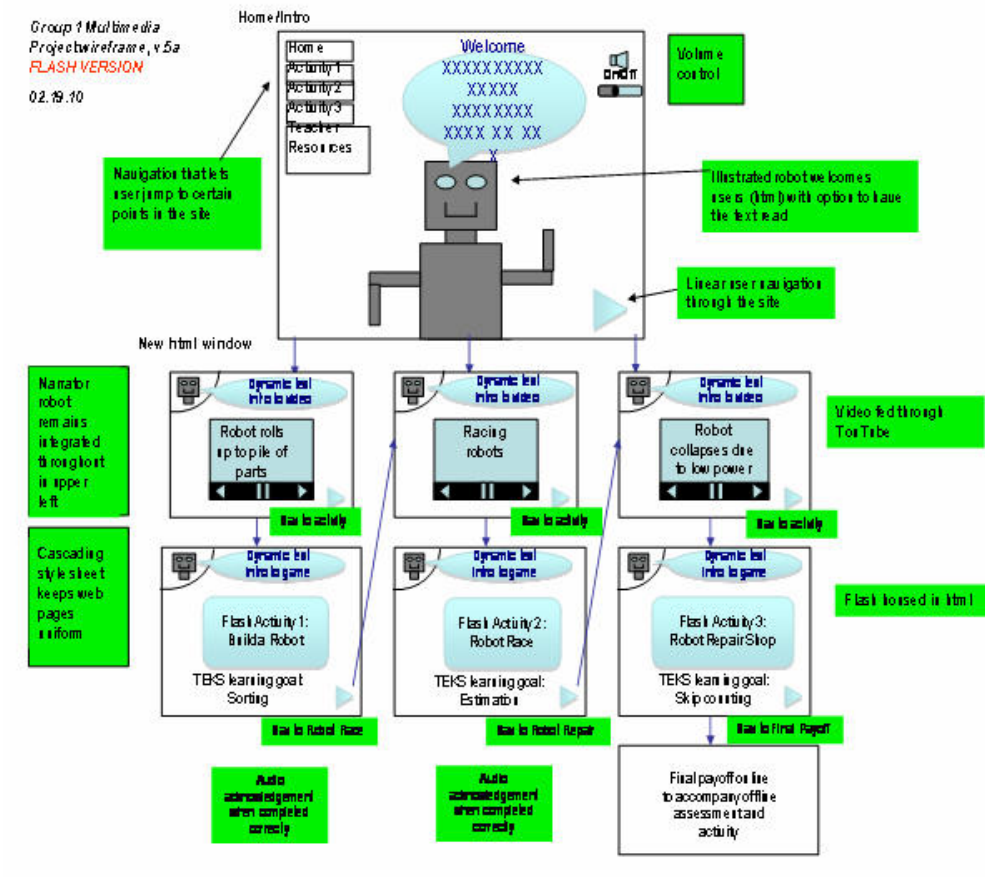


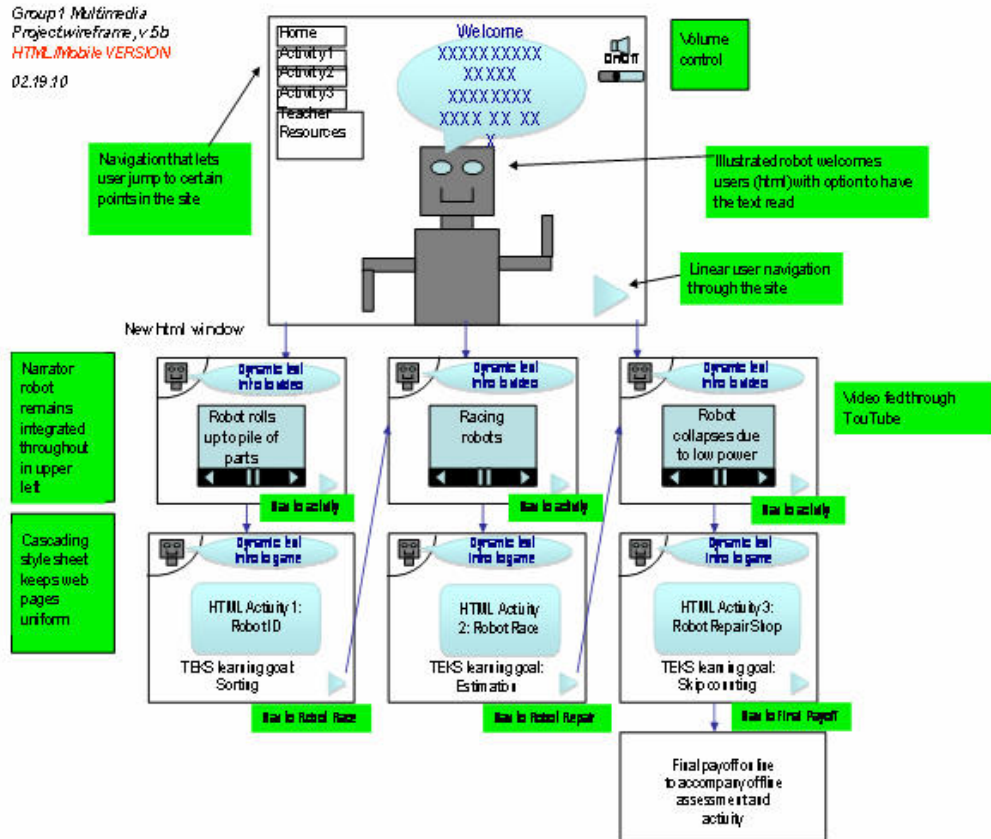
## Wire Frame of Project: Final Links and Schematic

[Final Web Link](#) (Represents the objectives of the wire frame project)

[Final Mobile Link](#) (Represents the objectives of the wire frame project)

# Wireframe of Project





### Training Strategy:

For our training, the strategy that we use a majority of the time is direct instruction oriented. However, it is important to try to incorporate group work and interactivity as much as possible into training classes. This way, the students are not only involved in educational pursuits, but they are meeting with fellow peers, which will help them to work collaboratively in the classroom.

One of the things that we cannot do because of time constraints and limitations is starting up an IST electronic mentoring program. For this, it will be the Student Development Specialist or Graduate Assistant in the IST program that will be responsible for making sure that training gets implemented, and is successful. In fact, there is a possibility that experienced teachers (with technology background) can do a student internship. Also, other education majors from other programs can do internships. Of course, this type of relationship extends beyond most problems including time constraints, scheduling, and availability.

### Sources for Training:

Because this training would involve so many resources from the College of Education, we would consult

the Dean, the Associate Dean, faculty, staff, and students from the college. We would also work closely with the Student Development Specialists in the college, primarily because they work so closely with students and their basic inquiries about first grade teachers and training.

These people would be consulted throughout the process of determining how we present the material, how detailed we would get in our presentation of materials, and when we would start to implement our training to newly admitted first grade teachers students. We would also consult other University websites for similar training sessions, and take advantageous suggestions to implement into our training program.

Before the training would be conducted, we would also form a focus group consisting of veteran first grade teachers, newly admitted first grade teachers, alumni, faculty, and staff, Student Development Specialists, Graduate Assistants majoring in Instructional Technology, the Associate Dean, and the Dean. We would divide these focus group participants into small groups, and show them our website and talk about the information session we might present. Questions, comments, and suggestions will be taken, and our service learning team will take these revisions into consideration. After sufficient revision, we would gather the focus groups back together for a review of our new materials and go through the same process. This process would be repeated until the focus groups and the service learning team both feel that the training has exceeded expectations. Once all is clear, it would be submitted to the Dean of the *College of Education* for implementation decision.

### **Constraints and Limitations:**

Some performance barriers that would affect program participants would include that first grader's prior knowledge and experience are deficient? This entails students whose cultural differences prohibit them from accessing online materials, students who have no authority to change policy, and students who are not motivated to make changes in his or her program of study. According to community or societal forces contribute to performance barriers. Moreover, they again include cultural differences which inhibit transfer of knowledge (new technology), and a lack of motivation by participants due to family conditions. In addition, necessary changes needed to apply learning factor into performance barriers.

These include unrealistic time issues to utilize new information and the perception that anything learned will assist in any new opportunity. Lastly and more importantly, emphasizes that an organizational context can factor into how participants see training as a barrier. There is a resistance by students and staff due to a lack of support for innovation, the new information is not in demand, and lack of participation due to an inadequate rewards system. All of these barriers present possible problems with the success of our program; however, by identifying these issues now, we hope to minimize the potential threat to success.

### **Training Resources:**

The training resources needed for this project will continue to evolve as this program develops. Initially, it will be important for the Project Manager (PM) to meet with the project advisor to discuss how best to begin the implementation of this program (class presentation). Resources that the PM will need for this will include:

- Access to Moodle, Ning, Pbwiki, Unfuddle
- Contact information of training group
- Training Manual copies/shown to other studies
- Technology equipped classrooms to conduct training
- Software Programs (Word, PPT, Publisher, Dreamweaver, and Flash) loaded on computers begin utilized

As training progresses, the addition of more courses may be needed to fully integrate technology. Also, our goal is to create an online portal that students can utilize for all areas of first grade teachers coursework. Transferring this training manual into a digital format will provide a constant reiteration of the information needed to excel in first grade teachers programs. (Seen in Teacher Resources)

### **Training Environment:**

Training programs have been provided in a variety of settings, ranging from schools to community colleges, military bases, and community centers. When the decision has been made to expand or establish programs, the administrator should:

- Locate a facility that is safe, accessible, and appropriate for teachers
- Ensure that the setting is conducive to teaching adults and has adequate lighting and ventilation
- Maintain a clean, secure facility that is free of hazards
- Identify an area that has sufficient parking, is accessible to public transportation, and is in an area where target population lives
- Ensure the facility is accessible to persons with disabilities

### **Purchase of equipment and supplies:**

Every training classroom should have adequate instructional materials and supplies to meet the needs of the teachers. A sample list of instructional materials has been included in the training site as well as a list of first grade teacher services available on campus. Access to computers and multimedia instructional aides can enhance student retention and achievement. Information on the use of technology in the classroom is included in this manual.

### **Training Design:**

UTSA Web and Multimedia Service Department has building tools and Training Development Services including costs. See link, [UTSA - Web and Multimedia Services](#)

### **Classroom Design and Accessibility for Training:**

#### Selecting a Site:

Many computer labs offer access to the training located at the downtown campus and at the 1604 campus. Some remote terminals have internet access. Instructional technology classrooms also have access to the internet. They must also provide program accessibility for persons with disabilities as required by Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA).

It is often difficult to find the ideal classroom or remote site that will enhance training viewing. Even local education-based settings are not always perfect. Some plans that should be considered when selecting an appropriate viewing for this service:

Facility should be accessible to persons with disabilities

Facility should be accessible to the student population served

Environment should be positive for students

Parking should be available

Water fountains and a break area should be available

Adult rest rooms should be available

Health, fire, and building codes should be in compliance

Adequate utilities, such as air conditioning should be available

### **Preparing the workplace for Training:**

Rooms for adult learners should be neat and pleasant. Students/Staff need to view training in an area where they have contact with technical experts or student development specialists. The training should be done in an area that staff and students are comfortable in. Arrange the training where students can go for small group instruction, learning centers, computer-assisted instruction, or individual work. The Frio building downtown seems to be a good site for training. The MS building and Business Building at the 1604 campus is another good location.

### **Training Materials:**

The UTSA First grade teachers' Service-Learning project has been developed to assist the College of Education and Human Development in how to efficiently deliver first grade teachers services to enrolled first grade teachers at the school. Specifically, this training targets first grade teacher enrolled in the IST program.

### **Brief description:**

The training guide features a cover sheet for the instructors to use for each module, and a course outline for each module of how to deliver the educational activity. The last part focuses on student assessment and review of concepts learned.

**Enhanced Description:**

The UTSA First grade teachers' Service-Learning project contains three primary modules. Before lesson module or a pre-training activity will be done so that teachers become familiar with using technology in the classroom. Module 1 consists on a lesson teaching how to sort objects. Module 2 consists of a lesson on how to estimate. Module 3 consists of lesson on showing students how to skip-count. All the lesson activities begin with a training session before the teacher goes back to the classroom. All the training modules provide strategies to assist the first grade teachers' technology integration into the 1st grade classroom.

You will be able to link to the specific information as follows to the training packet (see Training Packet) when training manual is accessible through Flash, HTML and Mobile unit (iPod).

Training Packet may be copied as a curriculum guide for program and used in conjunction with this program.

**Course Outline:**

The intent of the workshop activities is to demonstrate how active learning strategies can be used in K-12 courses that are using technology, and to engage students in collaborative learning with real scenarios, problems, and stimulations. The following pages can be packaged together as a training packet for the instructor/trainer. Instructors are provided with the following for each course:

Cover sheet handout

Course Outline for instructor

Course Module

Course consists of five day workshop lessons (each taken back to school to use)

Assessment Activities

# **TRAINING PACKET**

## **TEACHING ELEMENTARY TEACHERS HOW TO USE MANIPULATIVES**

Pre-training Module-Day 1

## **HOW TO USE Flash/HTML/Mobile VERSION FOR 1ST GRADE**

Module 1-Sorting Activity-Day 2

## **HOW TO USE Flash/HTML TO DISPLAY SORTING ESTIMATING FOR 1ST GRADE**

Module 2-Estimating Activity-Day 3

## **HOW TO USE Flash/HTML TO DISPLAY SKIP COUNTING FOR 1ST GRADE**

Module 3-Skip-Counting Activity-Day 4

## **TEACHER RESOURCE MODULE**

Module 4- Teacher Resource/Assessment -Day 5

## Teaching Elementary Teachers How to use Virtual Manipulatives

Welcome the participants to the K-12 Technology Workshop which will assist the 1st grade teachers in the adoption of technology into the classroom

Describe the purpose of the 5 day workshop:

Teach teachers to use technology in the classroom through the use of virtual manipulatives such as Flash, HTML, and Mobile version (iPod) technology to create interactive lessons for first grade students.



What is the purpose of completing the K-12 Technology IST WORKSHOP?

To assist teachers enrolled in the IST Master level program

What are the objectives of the 5 day workshop?

Teachers will complete daily workshops and take technology lessons learned to his or her classroom for teaching purposes.

Teachers will integrate Flash/HTML and Mobile lessons like math.

**For more information, contact the College of Education and Human Development at  
XXX-XXX-XXXX**



**COEHD Workshop Series Course Outline**  
**Teaching elementary teachers how to use virtual manipulatives Module 1 Template**

Instructors: TBA

Date: TBA

Event:

A 45-minute teacher overview on using technology to assist first grade teachers to use virtual manipulatives/Flash to teach math. First grade teachers will be given time in class to practice what they will teach.

**Abstract:**

In order to prepare as instructional designer, development specialists/graduate assistants have the opportunity to influence outside the classroom by creating projects that influence instruction in today's classroom. By instructing first grade teachers on the use of instructional technology in the first grade classroom, first grade teachers will learn the use of virtual manipulatives to teach 1st grade math.

**Objectives:**

- Show examples of math games using Flash (template)
- Identify concepts first grade teachers will learn
- Understand the use of virtual manipulatives

Integrate a class discussion with feedback regarding what was learning

**Class Outline:**

1. Introduce technology plan format
2. Opening Activity/Power Point
3. Technology Plan Overview
4. Lesson Plan (Sorting)
5. Technology integration
6. Assessment
7. Evaluation

**Pre-Training Lesson-Day 1**

**Learning Environment:** First grade classroom

**Audience:** Current First grade students enrolled in 1st grade

**Activity Title/Number:** Pre-training on sorting, estimating, and skip-counting

**Task(s):** Introduce what the concept of collecting and sorting, estimating, and skip-counting.

Capture audience create prior knowledge atmosphere in relationship to TEKS information, and how technology is used to influence children.

**Objective(s):** Three pre-training worksheets will be used to teach 1st grade students how to sort, estimate, and skip-count

[Pre-Training Worksheets \(Teacher Resources\)](#)

**Directions:**

- A. Introduce the concept of sorting, estimating, and skip-counting by using training worksheets to review concepts
- B. Students work on robot worksheets that use batteries, coins, and gears to become familiar with upcoming math game
- C. Students work together on handouts.

**Type(s) of learning:** Sorting, Estimating, and Skip-Counting

**Media/materials:** Microsoft Word, Microsoft PowerPoint, Computer, Televisions, Internet access, Flash, **Other resources:** multimedia and audio support, Mobile device iPod

**Grouping Strategies, if applicable:** Students may be grouped by prior knowledge (ability grouping)

**Time needed:** 45 minutes including demonstration and actual game activity and feedback

**Introduction (activates attention, establish instructional purpose, arouse interest and motivation, preview lesson):** “Who knows what a robot does?” Wait for response...”okay...a robot is like a human but is made of machine parts. The big part is the head. The head has a computer inside that tells all the parts of the robot to work. So, if you think about it...the robot is like a person...then you are correct!

**Body (recall prior knowledge, process information, focus attention, employ learning strategies, evaluate and feedback):**

Introduce prior knowledge by using identifying objects such as batteries, coins and batteries in training worksheets to introduce sorting, estimating, and skip-counting

**Assessments (assess performance, evaluate and give feedback, remediate):** Performance assessments and evaluations are based on the worksheets.

**Conclusion (summarize and review, transfer knowledge, re-motivate and close):** “Okay, let’s review what we have learned today?”

### IST 1st grade SORTING Template module 1

#### Suggested Procedures

#### Notes for the Instructor/ Trainer

Welcome the participants to the IST 1st grade technology Workshop which will assist the 1st grade teachers in the adoption of technology into the classroom

Describe the purpose of the workshop:



Objectives of the IST 1st grade Workshop

When you complete this workshop, you will be able to implement a Flash website, HTML website, and Mobile site and provide daily activities like math games for 1st graders.

The Purpose of the IST 1st grade Workshop

Teachers learn to implement a technology lesson (Pre-training) for 1st grade students

Describe the performance objectives of the workshop



For more information,  
contact the College of Education and Human Development at XXX-XXX-XXX

## COEHD Workshop Series Course Outline Sorting/Using Flash/html Template

Flash Activity/HTML Activity Module 1

Instructors: TBA

Date: TBA

Event:

A 45-minute student overview of how IST first grade teachers will learn to utilize two versions of technology (Flash and html) using manipulatives. The concept being demonstrated to students is sorting.

### **Abstract:**

A first grade teacher will transfer learning from video and worksheet learned to graphic images and using virtual manipulatives to represent the robot to the robot parts with words/labels to represent the sorting concept.

### **Objectives:**

- Use Flash, HTML, Mobile version to transfer learning from video to website and game activities
- Utilize manipulatives to show sorting concept
- Set up Flash, HTML, and Mobile unit (iPod)
- Integrate a class discussion about what they thought about the lesson learned

**Class Outline:**

1. Introduce Lesson format on website
2. Opening Activity/Power Point
3. Technology plan Overview
4. Lesson Plan
5. Technology integration (e.g. using Flash, HTML, Mobile version)
6. Assessment
7. Evaluation

**Flash Activity/HTML Activity/Mobile Version available 1-Lesson Day 2**

**Learning Environment:** First grade Classroom

**Audience:** Current students enrolled in 1st Grade

**Activity Title:** Robot Crash video, [Sorting game] Build a Robot (Flash) or [HTML] or [Mobile Version]

**Task(s):** Introduce tasks how to sort, show examples in real time of how to move objects, or use multiple choice button and are introduced how to navigate within website

**Objective(s):** Students will view video, and be able to correctly complete and process a sorting game

Depending on version of game:

Flash: sort robot pieces from bank of parts, then click- and-drag

HTML: sort robot pieces from bank of parts, then click-and-drag

Mobile: links to podcasts and same game activity

**Directions:**

- A. Introduce the concept of sorting by viewing a video
- B. Students will partner in 2's and get on computer and play sorting game
- C. Students work together to solve

**Type(s) of learning:** Sorting

**Media:** Word, PowerPoint, Computer, Internet access, Projector hooked up to computer, Flash and (HTML) **Other resources:** multimedia and audio support, Mobile device iPod

Grouping Strategies, if applicable: Students may be grouped by prior knowledge (ability grouping)

**Time needed:** 45 minutes including demonstration and actual game activity and feedback

**Introduction (activates attention, establish instructional purpose, arouse interest and motivation, preview lesson):** So is everyone ready to play another game? Wait for response, “Okay let get together with your partner from yesterday.” (Walk through these steps while demonstrated by robot and slow down or speed up depending on the audience reaction, etc.) “The first step is to log on computer. Once you have logged in, click on website listed as games.” Once that menu appears, go to “Crash Robot video” and once you understand, proceed to filling out the information, and press the submit button. Listen to the introduction by Rowdy the robot and proceed to Activity 1. “Now, if any you have any questions about what is happening, I will be happy to answer them at this time.”

**Body (recall prior knowledge, process information, focus attention, employ learning strategies from practice, evaluate and feedback):** (Pay attention to learners while students view robot narration and slow down or speed up depending on the audience reaction, etc.) (Answer any questions; allow some time to process the information) “If there are no more questions, I am going to ask you to get into your groups that you formed earlier.” (Allow time to regroup) Once you are in your groups, discuss what is happening in the game. Discuss the options among the students. Ask them about the robot and the audio narration. (Walk around the classroom as the students play the game). The learner will be instructed to drag and drop objects using the game slider/dragger. Rowdy will say "Yee Haw Partner" if you completed activity.

**Conclusion (summarize and review, transfer knowledge, re-motivate and close):**  
Ask them about them the experience. “How did everyone like the math game?”

**Assessments (assess performance, evaluate and give feedback, remediate):** Check them about the concept learned that day? So, did anybody have a hard time understanding the game? Were able to move around on the computer? Did anybody have a hard time reading the words? How about the pictures? What about the colors?”

## IST 1ST GRADE ESTIMATING TEMPLATE MODULE 2

### Suggested Procedures

### Notes for the Instructor/ Trainer

Welcome the participants to the IST 1st grade Technology Module 2 Workshop which will assist the 1st grade teachers in the adoption of technology into the classroom.

Describe the purpose of the workshop:

The Purpose of the IST 1st grade Technology Workshop is to show First grade teachers how to show 1st grade student how to estimate time using a math game

Objectives of the IST 1st grade Technology Workshop

When you complete this workshop, you will be able to show your 1st grade students estimate time using Flash, HTML technology and integrate a Mobile version.



**For more information contact the  
College of Education and Human Development at XXX-XXX-XXXX  
COEHD Workshop Series Course Outline**

## **Robot Race Activity 2 Template**

Instructors: TBA

Date: TBA

### Event:

A 45-minute teacher overview on using technology to assist first grade teachers to use virtual manipulates/Flash to teach the concept of estimating. Further, first grade students will follow new game using robot(s) to estimate time.

Abstract: A first grade teacher will transfer learning from video and worksheet learned to graphic images and using virtual manipulatives to represent the robot to the robot parts with words/labels to represent the estimating concept.

**Objectives:**

- Follow up on robot game with a concept of estimating
- Check for understanding by students' use of multiple choice
- Students understand feedback by game when they receive audio response

Integrate a class discussion on estimating

**Class Outline:**

1. Introduce estimating concepts
2. Opening Activity/Power Point
3. Technology Overview
4. Lesson Plan-estimating
5. Technology integration
6. Assessment
7. Evaluation

**Flash Activity/HTML Activity/Mobile Version available 1-Lesson Day 3**

**Learning Environment:** First Grade Classroom

**Audience:** Current students enrolled in 1<sup>st</sup> grade

**Activity Title/Number:** Robot race video, Estimating game] (Flash) or Robot ID [HTML] or [Mobile Version]



**Task(s):** Students view a video. Students will press start button to begin race. Students will estimate stopping time of robots. Students given stopping cues and will estimate when the last robot will stop.

**Objective(s):** Given different purposes and formats of stopping times, the student will use multiple choice buttons to estimate the stopping point of last robot in race. The problem will be executed in Flash, HTML, and Mobile versions.

Depending on version of game

Flash: solve by estimating and use multiple-choice to solve

HTML: solve by estimating use multiple-choice to solve

Mobile: links to podcasts and same game activity

**Directions:**

- A. Introduce the concept of estimating by showing a video clip of the concepts discussed.
- B. Students will partner in 2's and get on computer.
- C. Students work together to solve.

**Type(s) of learning:** Estimating

**Media:** Word, PowerPoint, Computer, Internet access, Projector hooked up to computer, Flash and HTML

**Other resources:** multimedia and audio support, Mobile device (iPod)

Grouping Strategies, if applicable: students may be grouped based on prior knowledge (ability grouping)

**Time needed:** 45 minutes including demonstration and actual game activity and feedback

**Introduction:** (activates attention, establish instructional purpose, arouse interest and motivation, preview lesson.

So is everyone ready to play another game? Wait for response, "Okay let get together with your partner from yesterday." (Walk through these steps while demonstrated by robot and slow down or speed up depending on the audience reaction, etc.) "The first step is to log on computer. Once you have logged in, click on website listed as games." Once that menu appears, go to "Robot Race video" and once you understand, proceed to filling out the information, and press the submit button. Listen to the introduction by Rowdy the robot and proceed to Activity 2. "Now, if any you have any questions about what is happening, I will be happy to answer them at this time."

**Body (recall prior knowledge, process information, focus attention, employ learning previously learned, practice, evaluate and provide feedback):** "This time around we are having a race with the robots. Let's get together with your team mate from yesterday." (Answer any questions; allow some time

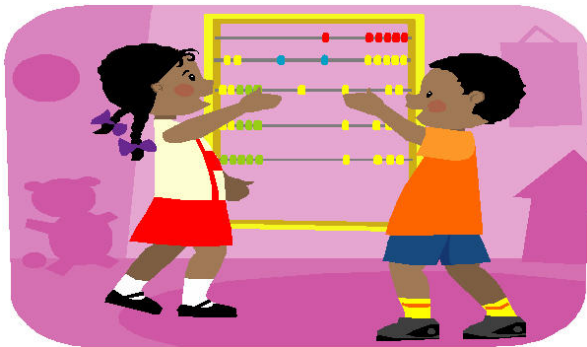
to process the information) (Allow time to regroup) Once you are in your groups, discuss what is happening in the game. Continue to check kids in the classroom for guidance. Pay attention to learners while students view robot narration and slow down or speed up depending on the audience reaction, etc.) (Answer any questions; allow some time to process the information) (Allow time to regroup) Once you are in your groups, discuss what is happening in the game. Discuss the options among the students. Ask them about the robot and the audio narration. (Walk around the classroom as the students play the game). The learner will be instructed to use multiple choice options to answer. The students will receive a "Yahoo" confirmation from Rowdy informing the kids that they got the response correct.

**Conclusion (summarize and review, transfer knowledge, re-motivate and close):**

“So how did everyone enjoy the race with the robots?”

**Assessment (assesses performance, evaluate and give feedback, remediate):**

Check for understanding on estimating.



### Skip-Counting Template Module

#### Suggested Procedures

#### Notes for the Instructor/ Trainer

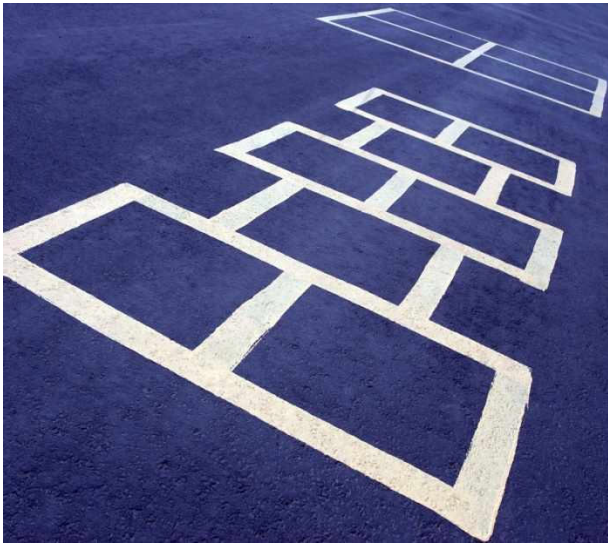
Welcome the participants to the IST 1st grade Technology Module 3 Workshop which will assist the 1st grade teachers in the adoption of technology into the classroom

What is the purpose of the workshop?

The purpose of the workshop is to teach you how to show your students how use technology in the classroom by using a concept lesson like skip-counting.

What are the objectives of the workshop?

When you complete this workshop, you will be able to show your 1st grade students skip-counting using Flash, HTML, and Mobile version.



**For more information,  
contact the College of Education and Human Development at XXX-XXX-XXXX**

### **COEHD Workshop Series Course Outline Creating a Skip-Counting game Template-Activity 3**

Instructors: TBA

Date: TBA

Event:

A 45-minute teacher overview on using technology to assist first grade teachers to use virtual manipulates/Flash/HTML/Mobile version to teach the concept of skip-counting. Further, first grade

students will follow a game using robot(s) to determine numbers more than one.

**Abstract:**

In order to understand the use of technology integration, first grade teachers students will need to choose a media type such as Flash, HTML, and Mobile version. The focus of this workshop is to bring in a sample template created from a previous session and practice creating samples for a game for 1st grade students. Using the skip counting as an exercise example, first grade teachers will begin to ask questions about how to integrate lessons into their website. Problem based learning is a vital strategy in solving how First grade teachers can integrate technology back to his or her classroom.

**Objectives:**

- Practice using media types to integrate a skip-counting game using Flash, HTML and Mobile version
- Create multiple choice buttons on Flash
- Illustrate the use of technology to teach students skip-counting
- Identify learning objectives of patterns and algebraic thinking

Integrate a class discussion on the basic levels of web design and it uses

**Class Outline:**

1. Introduce website
2. Opening Activity/Power Point
3. Game Overview
4. Lesson Plan
5. Technology integration (media type)
6. Assessment
7. Evaluation

**Flash Activity/HTML Activity/Mobile Version available 1-Lesson Day 4**

**Learning Environment:** First grade classroom

**Audience:** Current students enrolled in 1st grade

**Activity Title/Number:** Robot Repair video, [skip-counting game] (Flash) or [HTML] or [Mobile Version]

**Task(s):** Two questions (#of batteries then submit amount), (#of batteries to buy using dimes)

**Objective(s):** Students will learn how to skip-count using computer game

Depending on version of game

Flash: solve by skip-counting and use multiple-choice to solve

HTML: solve by skip-counting and use multiple-choice to solve

Mobile: links to podcasts and same game activity

**Directions:**

- A. Introduce the concept of skip-counting by showing a video clip of the concepts discussed.
- B. Students will partner in 2's and get on computer
- C. Students work together to solve

**Type(s) of learning:** skip-counting

**Media:** Word, PowerPoint, Computer, Internet access, Projector hooked up to computer, Flash and (HTML)

**Other resources:** multimedia and audio support, Mobile device iPod

**Time needed:** 45 minutes to play (start to finish)

**Introduction (activates attention, establish instructional purpose, arouse interest and motivation, preview lesson):**

**Body:** (recall prior knowledge, process information, focus attention, employ learning strategies from practice, evaluate and feedback): Students group together with same students as day before. "Okay let's get together with your team mate from yesterday." Using the information you received in the previous lesson, you will continue to play robot game. The game becomes more interactive with the use of 2 questions. Kids will be asked to replace robot batteries. "Has anyone in your family bought a battery? e.g. radio, toy" "What does a battery do?" Second part of question requires a purchase. Review how much a dime is. "How much is a dime?" "What does it look like?" Continue to monitor. The students will receive a confirmation informing the kids that they got the responses correct. Rowdy states "Yee Haw" again if you have completed activity. Also, Rowdy states that all three activities have been "lassoed."

**Conclusion (summarize and review, transfer knowledge, re-motivate and close):**

Review skip-counting with kids, and ask "So did everyone enjoy the game today?"

**Assessment (assesses performance, evaluate and give feedback, remediate):** Ask if this time if the game was harder? What part of the game was harder?

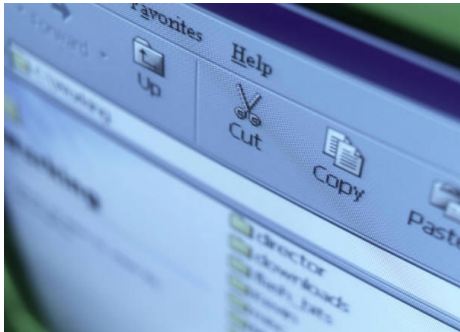
## TEACHER RESOURCE MODULE

**Suggested Procedures**

**Notes for the Instructor/ Trainer**

Welcome the participants to the K-12 Technology Workshop which will assist the 1st grade teachers in the adoption of technology into the classroom

What is the purpose of the workshop?



#### THE PURPOSE OF THE K-12 WORKSHOP

Integrate the use of technology into the, Align lessons to TEKs, teachers uses teacher resource module on the website to retrieve teaching materials for current and future use



What are the objectives of the lesson?

Learn how to insert background of lessons, training materials, and worksheets for reference use.

**For more information, contact the  
College of Education and Human Development at XXX-XXX-XXXX**

### **COEHD Workshop Series Course Outline Assessment and Teacher Activity Template**

Instructors: TBA

Date: TBA

Event:

A 45-minute student overview will assist IST first grade teachers' students in organizing contents and aligning artifacts with chosen standards for his or her teacher resource area. First grade teachers students will be given time in class to organize materials for website (approximately 2 hours). Additionally, they will be able to continue organizing their materials outside of this training session.

**Abstract:**

The focus of this workshop is help teachers integrate artifacts into teacher resource area as well as align artifacts with standards. This workshop will require students to apply their previously learned skills and incorporate creative thinking strategies to the design of their website.

**Objectives:**

- Work in chosen media type to create Flash, HTML, and Mobile version sites.
- Create a Teacher Resource page
- Align standards with artifacts in web based structure
- Review lessons learned and how to use appropriately
- Create math worksheets (sorting, estimating, and skip counting)
- Review "how to get feedback from students regarding online activities."

**Class Outline:**

1. Introduce Teacher Resource Page
2. Opening Activity/Power Point
3. Technology Overview
4. Lesson Plan
5. Technology integration (create page)
6. Assessment
7. Evaluation

**Learning Environment:** First grade classroom

**Audience:** Current students enrolled in 1st grade

**Activity Title/Number:** Offline assessment activity

**Task(s):** Review overall concepts learned

**Directions:**

- A. Introduce the concepts learned with an offline assessment activity
- B. Students will partner in 2's and get on computer
- C. Students work together to solve

**Objective(s): Type(s) of learning:** Determine how to use concepts of sorting, estimating and skip-counting

**Media:** Word, PowerPoint, Computer, Internet access, Projector hooked up to computer, Flash and (HTML) Other resources: multimedia and audio support, Mobile device iPod

**Time needed:** 1 hours of class time Introduction: (activate attention, establish instructional purpose, arouse interest and motivation, preview lesson): "Now that you are math game experts! Let's see if we can learn what we know." "Let's partner again with your team mate."

**Body:** (recall prior knowledge, process information, focus attention, and employ learning strategies from practice, assessment and feedback): Student will be able to complete an assessment using sorting, estimating, and skip-counting.

**Conclusion :** (summarize and review, transfer knowledge, re-motivate and close): "So, we now know how to use what you are learned from the math games to help you understand math problems. Great job everyone." Introduce prior knowledge by using identifying objects such as batteries, coins and batteries in training worksheets to introduce sorting, estimating, and skip-counting.

**Assessment (assesses performance, evaluate and give feedback, remediate):**

Review sorting, estimating, and skip-counting and the assessment worksheets used offline.

[Assessment worksheets \(Teacher Resources\)](#)

**Training Log:**

For face to face training sessions, the SDS/GA will make a log that suits their needs and record keeping abilities in order to have students sign in. From each training session, the SDS/GA will have hard copies of the logs that the students signed in on, and will proceed to make electronic copies of these files. Because it is important to keep track of who attends these face to face training sessions, it is recommended that the



SDS/GA keep the original logs, as well as having electronic copies of them.

It is also important to develop a required training log as part of each student's file. For example, when the SDS/GA goes through and checks student files, there should be an individual training log within each student's folder. This way, the SDS/GA has multiple copies of who received training. If students take some of the training classes online (if adapted), the website should have a record keeping capacity to send an email to the SDS/GA.

### **Updating Training Materials:**

One of the main training blocks that will continuously need to be checked for changes and updates is the website. A webmaster, working in conjunction with the SDS/GA, will keep the website and training materials up to date. Although the training materials will not necessarily be changing that often, current news and upcoming events should be posted on the website for students to view and the types of workshops that will be available.

Student Development Specialists/Graduate Assistants and the training committee should review, and become familiar with, these materials in order to facilitate an easier transition and change of the training materials, if necessary. It is imperative that more than one person be responsible for making sure the materials are up to date; therefore, the workload is shared among knowledgeable individuals that can ensure the most up-to-date training, information, and accuracy. Hopefully, the project proposed will lead to internships for students who want to train others in preparing for his or her professional careers in the field of education and instructional technology.