Digital Story:
Formative Evaluation Report

by
Berta Capo
Formative Evaluation Report

1. Background

   This formative evaluation report is being used to evaluate and determine needed changes for a professional development lesson for educators on digital story making. High school science teachers at Robert Morgan Educational Center in Miami Dade County used this print based unit to learn how to create a simple digital story on 1st, 2nd, and 3rd class levers.

   The lesson's purpose was to teach educators to construct science content digital stories so they can begin to use digital story making in their classrooms' instructional designs. They were given a print based lesson unit that included a print based lesson, a script, a blank script handout with assessment, and a storyboard. Additionally, they were provided with a computer that contained all the necessary electronic files for music and photography preloaded in desktop file folders. All of the computers had Photo Story 3 for Windows preinstalled.

2. Purpose

   The purpose of the Formative Evaluation was to insure that the print based lesson and unit components were complete, easy to follow and taught the terminal objective of the lesson effectively. The Formative Evaluation also enabled the designer to make changes needed to produce an error free and logically sequenced lesson. Furthermore, the Target Learners' comments and feedback assures that the instructions in the print based lesson will be clear, logically sequenced, tailored or linked to this Target Learner group, and that the performance objectives and lesson instructions will be logically sequenced.

3. Method

   - **Design**: The Formative Evaluation design required a design expert review, a one-to-one subject matter expert review, and a small Target Learner group review of 3 science teachers with varying degrees of computer technology ability: it included a low level technology user,
an average level technology user, and a high level technology user. The print based unit was utilized as one of the Formative Evaluation instruments because the reviewers underlined, highlighted, circled words and phrases and added comments directly into the print based material. Additionally, written observations, informal interview questions based on comments and reactions were made by the reviewers, and 2 different questionnaires (see appendix C and D) were used as formative evaluation instruments.

- **Expert Review.**
  - **Subjects:** The design expert was the Nova Southeastern University professor of Instructional Design.
  - **Instruments:** The instrument used was the actual print based unit.
  - **Procedure:** The lesson review was done after the lesson submission date.

- **Expert Review.**
  - **Subjects:** The subject matter expert was the computer technology instructor at Robert Morgan Educational Center. She is also the instructor that in the past has provided technology professional development to the staff at Robert Morgan Educational Center.
  - **Instruments:** The instrument used was the actual print based unit, informal interview questions in response to reactions and comments, and a likert scale questionnaire for the subject matter expert (see Appendix C).
  - **Procedure:**
    1. Discussed the terminal objective and print based unit purpose with the SME.
    2. Discussed the procedures of the FE with SME.
    3. Went over print based lesson, unit handouts, and desktop picture and music files with SME: made sure the SME focused on content and lesson procedure accuracy.
4. Went over print based lesson, unit handouts, and desktop picture and music files with SME; asked the SME to work through the unit lesson and highlight or underline, circle words and phrases and write in comments reactions regarding the lesson content, lesson breakdown and procedural flow.

5. Reviewed the terminal objective with the SME and wrote down reactions and comments.

6. Went over performance criteria and performance criteria sequence with SME and wrote down reactions and comments.

7. Went over the comments and reactions made by the SME in the print based lesson and unit handouts and asked questions to assure understanding of the SME’s comments. Wrote down reactions and comments.

8. Asked the SME to fill out the SME questionnaire (appendix C).

9. Asked SME if she had anything further to discuss or any further suggestions for improvement.

10. Asked the SME if she would be willing to review the updated unit in the future and thanked the SME.

- One to One (Target Learner)

  o **Subjects:** A science department high school teacher of average computer usage was selected for the preliminary trial of the print based unit. The trial attempted to assure that the instructions in the print based lesson were clear, logically sequenced, tailored or linked to this Target Learner group, and that the performance objectives and lesson instruction was logically sequenced.

  o **Instruments:** The print based lesson was used as an instrument. The Target Learner reviewed and worked through the unit lesson and highlighted or
underlined, circled words and phrases and wrote in comments and reactions. The likert questionnaire was filled out after the lesson was completed (see Appendix D for the Target Learner questionnaire).

**Procedure:**

1. Discussed the terminal objective and print based unit purpose with the Target Learner.

2. Discussed the procedures of the FE with Target Learner and made sure the Target Learner was comfortable with the FE procedures.

3. Went over print based lesson, unit handouts, and desktop picture and music files with Target Learner. Asked the Target Learner to work through the unit lesson and highlight or underline, circle words and phrases and write in comments reactions. Made sure the Target Learner was comfortable about correcting mistakes and adding input.

4. Reviewed the terminal objective with the Target Learner; and wrote down reactions and comments.

5. Went over performance criteria and performance criteria sequence with Target Learner; and wrote down reactions and comments.

6. Went over the comments and reactions made by the Target Learner in the print based lesson and unit handouts and asked questions to assure understanding of their comments. Wrote down reactions and comments.

7. Asked the Target Learner if she had anything further to discuss or any further suggestions for improvement.

8. Gave the Target Learner the questionnaire to complete (Appendix D).

9. Thanked the Target Learner.
Other Review Phase

- **Subjects:** A small Target Learner group of 3 science teachers with varying degrees of computer technology ability: that included a low level technology user, an average level technology user, and a high level technology user. These were a small representative sample of the science department at Robert Morgan Educational Center.

- **Instruments:** The print based lesson was used as an instrument. The Target Learners reviewed and worked through the unit lesson and highlighted or underlined, circled words and phrases and wrote in comments and reactions. The likert questionnaire was filled out after the lesson was completed (see Appendix D for the Target Learner).

- **Procedure:**
  1. Discussed the terminal objective and print based unit purpose with the Target Learners.
  2. Discussed the procedures of the FE with Target Learners and made sure they were comfortable with the FE procedures.
  3. Went over print based lesson, unit handouts, and desktop picture and music files with Target Learners. Asked the Target Learners to work through the unit lesson and highlight or underline, circle words and phrases and write in comments reactions. Made sure they were comfortable about correcting mistakes and adding input.
  4. Reviewed the terminal objective with the Target Learners; and wrote down reactions and comments.
  5. Went over performance criteria and performance criteria sequence with Target Learners; and wrote down reactions and comments.
6. Went over the comments and reactions made by the Target Learners in the print based lesson and unit handouts and asked questions to assure understanding of their comments. Wrote down reactions and comments.

7. Asked Target Learners if they had anything further to discuss or any further suggestions for improvement.

8. Gave the Target Learners the questionnaire to complete (Appendix D).

9. Thanked the Target Learners.

- **Constraints:** Time was a limiting factor in this very busy high school. Some teachers did request to take the material and complete it at home. This did compromise invaluable observation and restricted the FE to questions, written comments, and the questionnaire. Some data was probably lost due to faulty recall.

4. **Results and Discussion (presented by groups/type of evaluation)**

- **Design Expert** - The design expert suggested the removal of learner handouts from the appendix and suggested using the appendices sparingly. This use of the appendices also proved to be disliked by some of the Target Learners. Additionally, the absence of a lesson conclusion was noted along with the need to omit the word "learner" from the objective. The instructions on page 4 requiring feedback for script completion were noted by the Design Expert as being unclear.

- **SME** - The following questionnaire was completed by the SME. The Likert Scale score selected by the SME has been highlighted and the comments have been typed in. The comments typed include both written responses and verbal responses. The SME elaborated on her comments and reactions when verbally questioned by the instructional designer.
<table>
<thead>
<tr>
<th>Questions</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neither agree or disagree</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is the time allotted for the lesson sufficient?</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>Suggested the lesson be divided into several lessons.</td>
</tr>
<tr>
<td>2. Are the performance objectives sequenced correctly?</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>There was a problem with the instructions to hit next that was misplaced in the lesson order.</td>
</tr>
<tr>
<td>3. Is the lesson information accurate? If not, then what information is inaccurate?</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>The lesson appears to be well organized but there are always glitches when computer lessons are given to students without program familiarity. The SME is certain that this lesson will require more time to complete when it is actually implemented with a class of teachers with different computer skills.</td>
</tr>
<tr>
<td>4. Was the lesson content missing any necessary information required of a first lesson?</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>The lesson appears to be well organized but there are always glitches when computer lessons are given to students without program familiarity. The SME is certain that this lesson will require more time to complete when it is actually implemented with a class of teachers with different computer skills.</td>
</tr>
<tr>
<td>5. Does the lesson teach the basic information necessary to construct a digital story?</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>Yes, but does not like having teachers simply copy the storyboard. Suggests this section be broken down into a separate lesson and allowing teachers to construct their own simple storyboard.</td>
</tr>
<tr>
<td>6. Do you believe an average high school science teacher will be able to understand the basics of constructing a digital story after completing this lesson?</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>7. Was the lesson logically ordered?</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>Yes, except for the instructions for maneuvering through the program was one step behind.</td>
</tr>
</tbody>
</table>
8. Were the materials appropriate for the lesson objectives?  

<table>
<thead>
<tr>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neither agree or disagree</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Redesign the storyboard written activity.

9. Was the rubric provided sufficient for the digital story evaluation?  

<table>
<thead>
<tr>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neither agree or disagree</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

The rubric point system seemed arbitrary and required a more even distribution of points based on task importance.

- **Target Learners** - The following chart is a summary of the comments made by all the Target Learners. Additionally, the mean average Likert score for each item was calculated and entered.

<table>
<thead>
<tr>
<th>Target Learner Questions</th>
<th>Mean Score Given by Target Learners</th>
<th>Summary of all Target Learner Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is the learning objective appropriate for a 30 minute class?</td>
<td>2</td>
<td>The average completion time was 1 hour and 10 minutes.</td>
</tr>
<tr>
<td>2. Is the learning objective useful and of interest to high school science teachers? If not, what should be added or changed?</td>
<td>5</td>
<td>Two of the Target Learners noticed the need to shift the position of the &quot;press next&quot; instructions to page 7 instead of on page 11.</td>
</tr>
<tr>
<td>3. Are the performance objectives sequenced correctly</td>
<td>4</td>
<td>Yes, but most of the teachers expressed a dislike for copying the storyboard. Most questioned why and two teachers did very little of this activity. More pictures should be added to the picture folder and the lesson should be</td>
</tr>
<tr>
<td>4. Does the lesson teach the basic information necessary to construct a digital story?</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

Formative Evaluation Plan
<table>
<thead>
<tr>
<th>Question</th>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Is the lesson easy to follow?</td>
<td>3</td>
<td>There were several glitches with the pictures. One picture would not load and there was some trouble with the black borders on several of the pictures. These glitches caused more time loss when entering the pictures. Additionally, one student was very confused in the drop and drag instructions that were given to organize the picture order. They were trying to drop and drag the pictures in the file window and did not notice the storyline pictures appearing at the bottom of the program were the actual drop and drag was required. The instructions for this step will require clarification.</td>
</tr>
<tr>
<td>6. Was the lesson interesting?</td>
<td>4</td>
<td>Yes, except for the script and digital story activity that required duplicating. The Target Learners expressed a dislike for this and a more appropriate original script and digital story construction activity</td>
</tr>
</tbody>
</table>
In summary, the lesson taught teachers how to construct a simple digital story though the lesson continues to need some work; especially a need to address the time issue. The computer glitches with the provided pictures need to be resolved and may help shorten the lesson time. Regardless, other design flaws suggest a need to reevaluate the script and digital story activities to align the activity with the needs of adult learners. This will require dividing the lesson into units.

5. Recommendations

Both the SME and the Target Learners scored the digital story lesson poorly when evaluating the amount of time required for lesson completion. Additionally, the script and storyboard activity was not accepted well and additional lesson design is required to allow the learners to produce their own simple script and digital story as the learner’s activity. This will require addition lesson time and therefore, it is suggested that the lesson be subdivided into
additional units. Three units will more than likely be required: Unit 1 - ending in an original simple script production with the existing assessment and feedback (feedback requires clarification according to the Design Expert), Unit 2 - an original digital storyboard production with its assessment and feedback, and Unit 3 - the rest of the lesson with minor picture glitch modifications.

Each lesson must end in a conclusion as specified by the Design Expert and the objectives need to be reworded to remove the word "learn". The objectives must focus on what the learner will be able to do when they complete the lesson. All ancillary materials will be provided in the modules and not in the appendices.

The navigation instructions will be moved from page 11 to page 7. Additionally, the instructions for moving and dragging pictures in the storyline will be clarified: a Target Learner that was unfamiliar with similar software became very confused.

The picture quality in the folders and the diversity of the selection will be improved. Black borders proved to be a glitch to several Target Learners and took up their time because they had to enter text and they tried to clear the black borders. One of the pictures refused to load. All pictures must be tested for usability to avoid computer software glitches.

The digital story assessment rubric proved to be a concern for both the SME and several of the Target Learners. An appropriate weight on each of the digital story components must be calculated and the rubric must be adjusted.
Appendix A: Overall Plan
## Appendix A: Overall Plan

See the chart below.

### Overall Formative Evaluation Plan

<table>
<thead>
<tr>
<th>Phase</th>
<th>Evaluator</th>
<th>Date</th>
<th>Target</th>
<th>Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expert Review</td>
<td>• Design Expert</td>
<td>• March 29</td>
<td>• Goals &amp; Objectives</td>
<td>• Print based lesson</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Instructional Strategy</td>
<td></td>
</tr>
<tr>
<td>Subject Matter Expert Review</td>
<td>• Subject matter expert</td>
<td>• April 1</td>
<td>• Terminal objective</td>
<td>• Print based lesson</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Print based digital story lesson and unit components</td>
<td>• Likert questionnaire for SME (Appendix C)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Assignment sequence and Performance Criteria</td>
<td>• Interview Questions</td>
</tr>
<tr>
<td>One on One</td>
<td>• Target Learner</td>
<td>• April 2</td>
<td>• Print based digital story lesson and unit components</td>
<td>• Print based lesson</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Assignment sequence and Performance Criteria</td>
<td>• Likert questionnaire for the Target Learner (Appendix D)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Interview Questions</td>
</tr>
<tr>
<td>Small Group Evaluations</td>
<td>• Target learner (High Achievement)</td>
<td>• April 6</td>
<td>• Print based digital story lesson and unit components</td>
<td>• Print based lesson</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Assignment sequence and Performance Criteria</td>
<td>• Likert questionnaire for the Target Learner (Appendix D)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Interview Questions</td>
</tr>
<tr>
<td>Small Group Evaluations</td>
<td>• Target learner</td>
<td>• April 6</td>
<td>• Print based digital story lesson and unit components</td>
<td>• Print based lesson</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Likert questionnaire for the Target Learner (Appendix D)</td>
</tr>
</tbody>
</table>

Formative Evaluation Plan 14
<table>
<thead>
<tr>
<th>(Middle Achievement)</th>
<th>components</th>
<th>• Assignment sequence and Performance Criteria</th>
<th>• Interview Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Small Group Evaluations</td>
<td>• Target learner (Low Achievement)</td>
<td>• April 6</td>
<td>• Print based digital story lesson and unit components</td>
</tr>
</tbody>
</table>
Appendix B: Specific Formative Evaluation Protocols
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The instructions or checklists used by the administrator of the FE. See below.

Specific Formative Evaluation Protocol

Course: Digital Story Unit
Facilitator: Berta Capo
Evaluator: Subject Matter Expert (Matty Rodriguez-Walling)
Date: April 1, 2009

Targets:
- Terminal objective
- Print based digital story lesson and unit components
- Assignment sequence and Performance Criteria

Technique:
- One-to-One (SME) Formative Evaluation

Purpose:
- The purpose of the SME Formative Evaluation is to insure that the print based lesson and unit components are accurate in content and that the computer based lesson is well constructed. The SME will analyze the content and flow of the lesson to assure that the lesson does teach the terminal objective accurately and effectively. The Formative Evaluation will also enable the designer to make sure the unit is error free.

Questions:
- Is the time allotted for the lesson sufficient?
- Are the performance objectives sequenced correctly?
- Is the lesson information accurate? If not, then what information is inaccurate?
- Was the lesson content missing any necessary information required of a first lesson?
- Does the lesson teach the basic information necessary to construct a digital story?
- Do you believe an average high school science teacher will be able to understand the basics of constructing a digital story after completing this lesson?
- Was the lesson logically ordered?
- Were the materials appropriate for the lesson objectives?
- Was the rubric provided sufficient for the digital story evaluation?

Procedure:
1. Discuss the terminal objective and unit purpose with the SME.
2. Discuss the procedures of the FE with SME.
3. Go over print based lesson, unit handouts, and desktop picture and music files with SME; ask the SME to work through the unit lesson and highlight or underline, circle words and phrases and write in comments and reactions.
4. Review the terminal objective with the SME and write down reactions and comments.
5. Go over performance criteria and performance criteria sequence and lesson content with SME and write down reactions and comments specifically noting any content errors.
6. Go over the comments and reactions made by the SME in the print based lesson and unit handouts and ask questions to assure understanding of the SME’s comments. Write down reactions and comments.
7. Ask SME if she has anything further to discuss or any further suggestions for improvement.
8. Give the SME the questionnaire to complete (Appendix C).
9. Ask the SME if she would be willing to review the updated unit in the future and thank the SME.

Materials:
- Hard copy of Print based lesson
- Hardcopy of Terminal Objectives
- Hardcopy of script and storyboard
- Computer Workstations with Photo Story 3 for Windows software
- Desktop Folder with pictures files
- Desktop folder with background music files
- Questionnaire (Appendix C)
Course: Digital Story Unit  
Facilitator: Berta Capo  
Evaluators (One on One Target Learner): (Vivian Vieta)  
Date: April 2, 2009

Targets:
- Print based digital story lesson and unit components
- Assignment sequence and Performance Criteria

Technique:
- Small Target Learner group Formative Evaluation

Purpose:
- The purpose of the Formative Evaluation is to insure that the print based lesson and unit components are complete, easy to follow and teach the terminal objective of the lesson effectively. The Formative Evaluation will also enable the designer to make sure the unit is error free. The target learners’ formative evaluation will determine if the instructions in the print based lesson are clear, logically sequenced, tailored or linked to this target learner group, and that the performance objectives and lesson instruction is logically sequenced.

Questions:
- Is the learning objective appropriate for a 30 minute class?
- Is the learning objective useful and of interest to high school science teachers? If not, what should be added or changed?
- Are the performance objectives sequenced correctly?
- Does the lesson teach the basic information necessary to construct a digital story?
- Is the lesson easy to follow?
- Was the lesson logically ordered?
- Was the lesson interesting?
- Did you understand the basics of constructing a digital story?
- Was the lesson logically ordered?
- Were the needed materials provided?
- Were the materials provided relevant and necessary?
- Was the rubric provided sufficient for the digital story evaluation?

Procedure:
1. Discuss the terminal objective and print based unit purpose with the Target learners.
2. Discuss the procedures of the FE with Target learners and make sure they are comfortable with the FE procedures.
3. Go over print based lesson, unit handouts, and desktop picture and music files with Target Learners; ask the Target Learners; to work through the unit lesson and highlight or underline, circle words and phrases and write in comments reactions. Make sure they are comfortable about correcting mistakes and adding input.
4. Review the terminal objective with the Target Learners; and write down reactions and comments.
5. Go over performance criteria and performance criteria sequence with Target Learners; and write down reactions and comments.
6. Go over the comments and reactions made by the Target Learners; in the print based lesson and unit handouts and ask questions to assure understanding of their comments. Write down reactions and comments.
7. Ask Target Learners if they have anything further to discuss or any further suggestions for improvement.
8. Give the target learners the questionnaire to complete (Appendix D).
9. Thank the Target Learners.

Materials:
- Hard copy of Print based lesson
- Hardcopy of Terminal Objectives
- Hardcopy of script and storyboard
- Desktop Folder with pictures files
- Desktop folder with background music files
- Computer Workstations with Photo Story 3 for Windows software
- Questionnaire Appendix (D)
Course: Digital Story Unit
Facilitator: Berta Capo
Evaluators (Target Learners): (Wayne Christensen, Adrianna Florian, Maria Sanders)
Date: April 6, 2009

Targets:
- Print based digital story lesson and unit components
- Assignment sequence and Performance Criteria

Technique:
- Small Target Learner group Formative Evaluation

Purpose:
- The purpose of the Formative Evaluation is to insure that the print based lesson and unit components are complete, easy to follow and teach the terminal objective of the lesson effectively. The Formative Evaluation will also enable the designer to make sure the unit is error free. The Target Learners’ formative evaluation will determine if the instructions in the print based lesson are clear, logically sequenced, tailored or linked to this Target Learner group, and that the performance objectives and lesson instruction is logically sequenced.

Questions:
- Is the learning objective appropriate for a 30 minute class?
- Is the learning objective useful and of interest to high school science teachers? If not, what should be added or changed?
- Are the performance objectives sequenced correctly?
- Does the lesson teach the basic information necessary to construct a digital story?
- Is the lesson easy to follow?
- Was the lesson logically ordered?
- Was the lesson interesting?
- Did you understand the basics of constructing a digital story?
- Was the lesson logically ordered?
- Were the needed materials provided?
- Were the materials provided relevant and necessary?
- Was the rubric provided sufficient for the digital story evaluation?

Procedure:
1. Discuss the terminal objective and print based unit purpose with the Target learners.
2. Discuss the procedures of the FE with Target learners and make sure they are comfortable with the FE procedures.
3. Go over print based lesson, unit handouts, and desktop picture and music files with Target Learners; ask the Target Learners; to work through the unit lesson and highlight or underline, circle words and phrases and write in comments reactions. Make sure they are comfortable about correcting mistakes and adding input.
4. Review the terminal objective with the Target Learners; and write down reactions and comments.

5. Go over performance criteria and performance criteria sequence with Target Learners; and write down reactions and comments.

6. Go over the comments and reactions made by the Target Learners; in the print based lesson and unit handouts and ask questions to assure understanding of their comments. Write down reactions and comments.

7. Ask Target Learners if they have anything further to discuss or any further suggestions for improvement.

8. Give the target learners the questionnaire to complete (Appendix D).

9. Thank the Target Learners.

Materials:
- Hard copy of Print based lesson
- Hardcopy of Terminal Objectives
- Hardcopy of script and storyboard
- Desktop Folder with pictures files
- Desktop folder with background music files
- Computer Workstations with Photo Story 3 for Windows software
- Questionnaire Appendix (D)
Appendix C: (Copy of the evaluation instrument)
Appendix C: (Copy of the evaluation instrument for Subject Matter Expert)

Name: ______________________ Date: ________________

Circle one for each question and write in your comments. Your comments are very important. If you need additional comment space a place has been provided at the end of the assessment.

Please use the following scale.

<table>
<thead>
<tr>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neither agree or disagree</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Questions | 5 | 4 | 3 | 2 | 1 | Comments |

1. Is the time allotted for the lesson sufficient?  
   5 4 3 2 1

2. Are the performance objectives sequenced correctly?  
   5 4 3 2 1

3. Is the lesson information accurate? If not, then what information is inaccurate?  
   5 4 3 2 1

4. Was the lesson content missing any necessary information required of a first lesson?  
   5 4 3 2 1

5. Does the lesson teach the basic information necessary to construct a digital story?  
   5 4 3 2 1

6. Do you believe an average high school science teacher will be able to understand the basics of constructing a digital story after completing this lesson?  
   5 4 3 2 1

7. Was the lesson logically ordered?  
   5 4 3 2 1

8. Were the materials appropriate for the lesson objectives?  
   5 4 3 2 1

9. Was the rubric provided sufficient for the digital story evaluation?  
   5 4 3 2 1

Additional Comments:____________________________________________________________________  
_____________________________________________________________________________  
_____________________________________________________________________________

Formative Evaluation Plan
Appendix D: (Copy of the evaluation instrument)
Appendix D: (Copy of the evaluation instrument for the Target Learners)

Name: ______________________ Date: ___________________
Circle one for each question and write in your comments. Your comments are very important. If you need additional comment space a place has been provided at the end of the assessment.
Please use the following scale.

<table>
<thead>
<tr>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neither agree or disagree</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Questions

1. Is the learning objective appropriate for a 30 minute class?  
   5  4  3  2  1 Comments

2. Is the learning objective useful and of interest to high school science teachers? If not, what should be added or changed?  
   5  4  3  2  1

3. Are the performance objectives sequenced correctly  
   5  4  3  2  1

4. Does the lesson teach the basic information necessary to construct a digital story?  
   5  4  3  2  1

5. Is the lesson easy to follow?  
   5  4  3  2  1

6. Was the lesson interesting?  
   5  4  3  2  1

7. Did you understand the basics of constructing a digital story?  
   5  4  3  2  1

8. Was the lesson logically ordered?  
   5  4  3  2  1

9. Were the needed materials provided?  
   5  4  3  2  1

10. Were the materials provided relevant and necessary?  
    5  4  3  2  1

11. Was the rubric provided sufficient for the digital story evaluation?  
    5  4  3  2  1

Additional Comments:____________________________________________________________________
______________________________________________________________________________
_____________________________________________________________________

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