

Universal **D**esign for
Learning
and
Technology
Breaking Down Student
Language Barriers

July 2014

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Outcome/Goals:

- Introduction to the unique challenges of students with language barriers.
- Learn why and how these tools are beneficial for students with language barriers.
- Introduction to tech tools that have benefits for these students.
- Exploring how to use them in your classroom
- Hands-on support/practice time

Let's think and share for a moment,
What technology tools have you used
in the classroom?

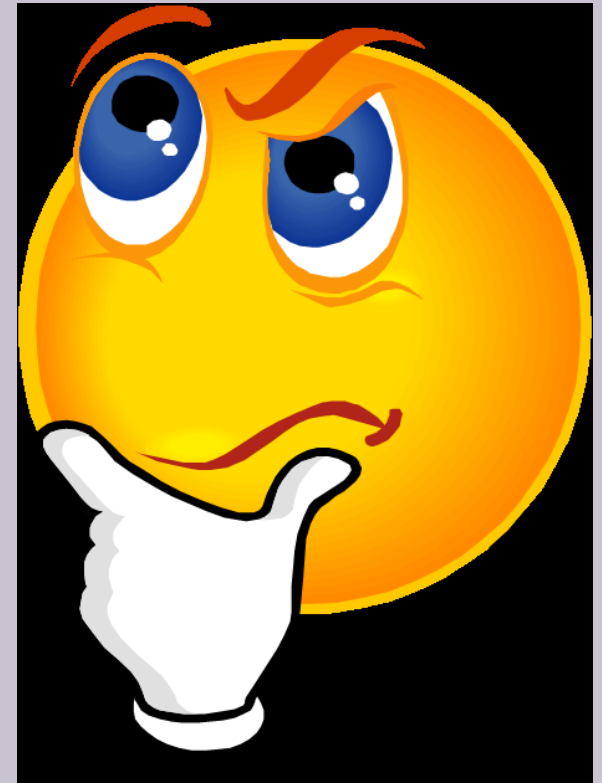


**Take another moment to
think?**

**What made school
fun for you?**

**Was it the
teacher? Why?**

**Was it an activity?
Why?**



conscience

Here is a clip from “I Love Lucy” of
Lucy and Ricky having a conversation
about English

<http://www.youtube.com/watch?v=g10jFL423ho>

Cannon Road Elementary School



Three Principles of UDL

I. Provide Multiple Means of Representation

Perception

Language, expressions, and symbols

Comprehension

II. Provide Multiple Means of Action and Expression

Physical action

Expression and communication

Executive function

III. Provide Multiple Means of Engagement

Recruiting interest

Sustaining effort and persistence

Self-regulation

1. Flexible methods of PRESENTATION

2. Flexible methods of EXPRESSION

3. Flexible methods of ENGAGEMENT



▶ E-TIPS Highlights

- ▶ [What is E-TIPS?](#)
- ▶ [E-TIPS Leaders](#)
- ▶ [Get Involved](#)
- ▶ [HIAT Workshop Schedule](#)

▶ HIAT Web

- ▶ [Resources](#)
 - ▶ [Websites](#)
 - ▶ [Quick Guides](#)
- ▶ [Support](#)
 - ▶ [Training Schedule](#)
- ▶ [E-TIPS](#)
- ▶ [Parents](#)
- ▶ [UDL](#)
- ▶ [Considering AT](#)
- ▶ [About HIAT](#)

HIAT Services
8001 Lynnbrook Drive
Bethesda, MD 20814
301-657-4959

[HIAT home](#) → [UDL Implementation](#)

Implementing Universal Design for Learning in Schools

Increase Awareness with Staff



Tools [HIAT Support](#)

- [What is UDL? \(FAQ\)](#)
- [Introduction to UDL in the Classroom](#) (50 min)
- [UDL Foundations](#) (4 hour self-paced course)
- [Information portals on UDL](#)
- [Planners, guides and checklists for UDL lesson planning](#)
- [Video examples of UDL in action](#)
- [The Ethics of Sharing](#)
- 2012 Maryland COMAR regulations on UDL in [PDF](#) and [PPT](#)

Create a PLC



Tools [HIAT Support](#)

- [How to start a UDL Study PLC \(FAQ\)](#)
- [Staff surveys to guide PLC planning](#)
- [Options to Guide a UDL PLC](#)
 - [Suggested list of PLC study topics](#)
 - [Online Discussion Forums](#)
 - [CPD SA-94 Technology Coaching and UDL](#)

Implement UDL School-wide

Tools [HIAT Support](#)

- [Principal reflections on UDL PLCs](#)
- [How to start a UDL Leadership PLC \(FAQ\)](#)
- [UDL instructional rounds process](#)

Universal Design for Learning Guidelines

I. Provide Multiple Means of Representation

1: Provide options for perception

- 1.1 Offer ways of customizing the display of information
- 1.2 Offer alternatives for auditory information
- 1.3 Offer alternatives for visual information

2: Provide options for language, mathematical expressions, and symbols

- 2.1 Clarify vocabulary and symbols
- 2.2 Clarify syntax and structure
- 2.3 Support decoding of text, mathematical notation, and symbols
- 2.4 Promote understanding across languages
- 2.5 Illustrate through multiple media

3: Provide options for comprehension

- 3.1 Activate or supply background knowledge
- 3.2 Highlight patterns, critical features, big ideas, and relationships
- 3.3 Guide information processing, visualization, and manipulation
- 3.4 Maximize transfer and generalization

Resourceful, knowledgeable learners

II. Provide Multiple Means of Action and Expression

4: Provide options for physical action

- 4.1 Vary the methods for response and navigation
- 4.2 Optimize access to tools and assistive technologies

5: Provide options for expression and communication

- 5.1 Use multiple media for communication
- 5.2 Use multiple tools for construction and composition
- 5.3 Build fluencies with graduated levels of support for practice and performance

6: Provide options for executive functions

- 6.1 Guide appropriate goal-setting
- 6.2 Support planning and strategy development
- 6.3 Facilitate managing information and resources
- 6.4 Enhance capacity for monitoring progress

Strategic, goal-directed learners

III. Provide Multiple Means of Engagement

7: Provide options for recruiting interest

- 7.1 Optimize individual choice and autonomy
- 7.2 Optimize relevance, value, and authenticity
- 7.3 Minimize threats and distractions

8: Provide options for sustaining effort and persistence

- 8.1 Heighten salience of goals and objectives
- 8.2 Vary demands and resources to optimize challenge
- 8.3 Foster collaboration and community
- 8.4 Increase mastery-oriented feedback

9: Provide options for self-regulation

- 9.1 Promote expectations and beliefs that optimize motivation
- 9.2 Facilitate personal coping skills and strategies
- 9.3 Develop self-assessment and reflection

Purposeful, motivated learners

<http://www.udlcenter.org/aboutudl/whatisudl/3principles>

The screenshot shows a web browser window displaying the National Center on Universal Design for Learning website. The address bar shows the URL: <http://www.udlcenter.org/aboutudl/whatisudl/3principles>. The browser tabs include "The Three Principles | Natio...", "Montgomery County Public Sc...", and "Montgomery County Public Sc...". The browser's address bar also shows "Welcome to Verizon Web...", "Google", "Montgomery County Pub...", and "SafeShare.TV - The Safest ...".

The website header features the logo for the National Center on Universal Design for Learning, with the tagline "Cultivating a dynamic, effective UDL field". Navigation links include "Home", "Skip to Content", "About the UDL Center", "Glossaries", and a search bar. A user is logged in as "Guest".

The main navigation menu includes: "About UDL (LEARN THE BASICS)", "Advocacy (CALL FOR CHANGE)", "Implementation (BE THE CHANGE)", "Research (KNOW THE FACTS)", "Community (CONNECT WITH OTHERS)", and "Resources (DISCOVER MORE)".

The "About UDL" section is active, showing the title "The Three Principles of UDL" and the subtitle "LEARN THE BASICS". A video player is embedded, titled "UDL: Principles and Practice", showing two young boys working together. The video player includes a play button, a progress bar (0:00 / 6:36), and the YouTube logo.

Text next to the video states: "Three primary principles, which are based on neuroscience research, guide UDL and provide the underlying framework for the Guidelines:". Below this text is a button that says "go to the UDL Guidelines".

A sidebar on the right contains a list of links under the heading "What is Universal Design for Learning?":

- How Has UDL Been Defined?
- The Concept of UDL
- The Three Principles**

Below this list are several other navigation links:

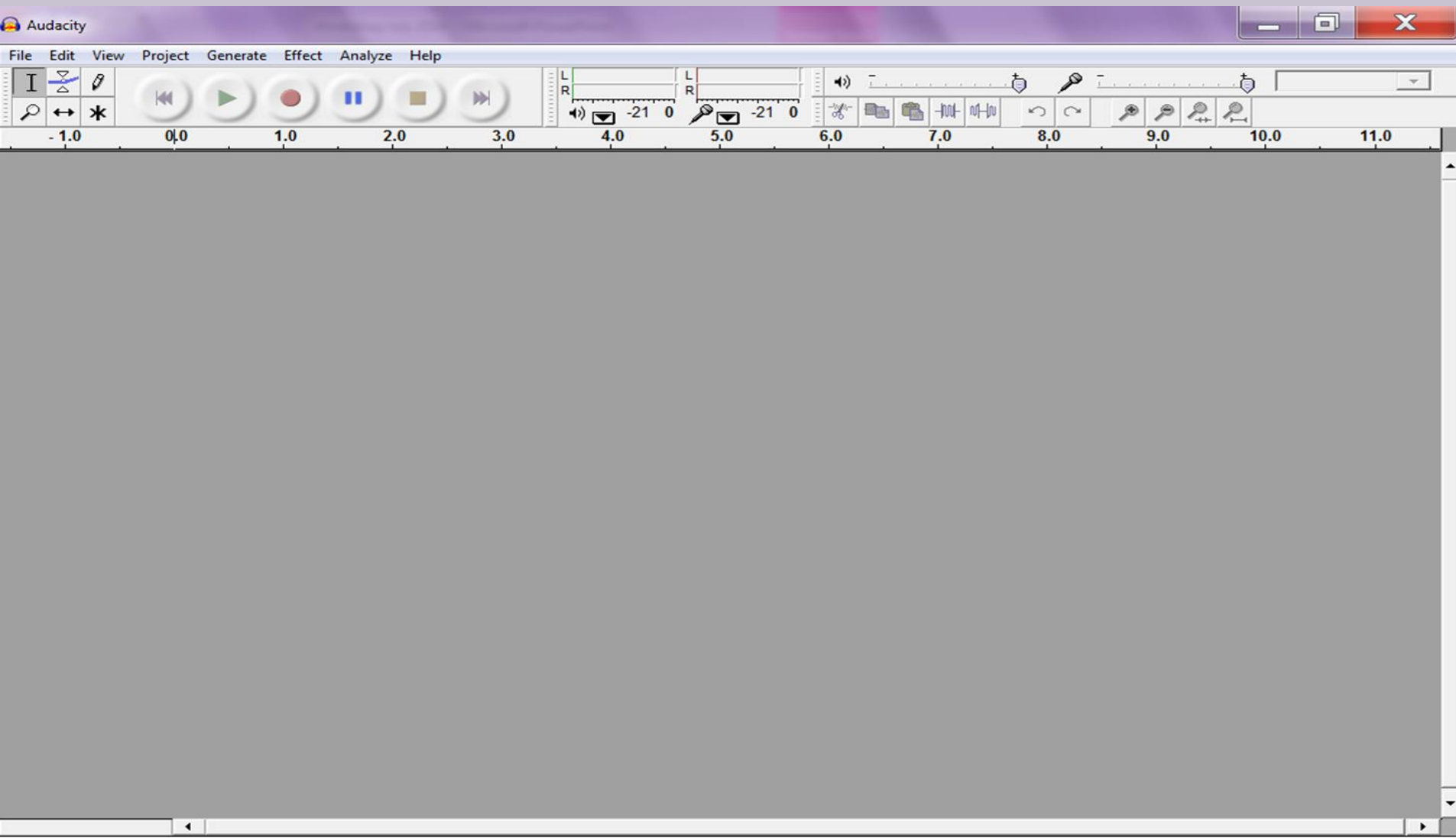
- UDL Guidelines: Theory & Practice
- UDL Guidelines 2.0
- UDL and the Curriculum
- UDL and Expert Learners
- UDL and Technology
- Highlights from the Resource Library

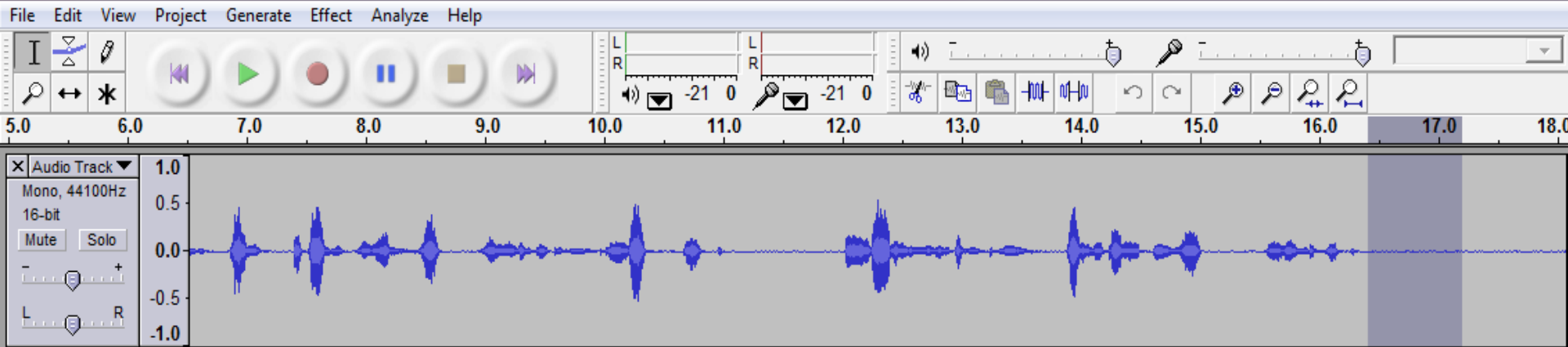


Audacity is a free, easy-to-use audio editor and recorder for Windows.

Audacity

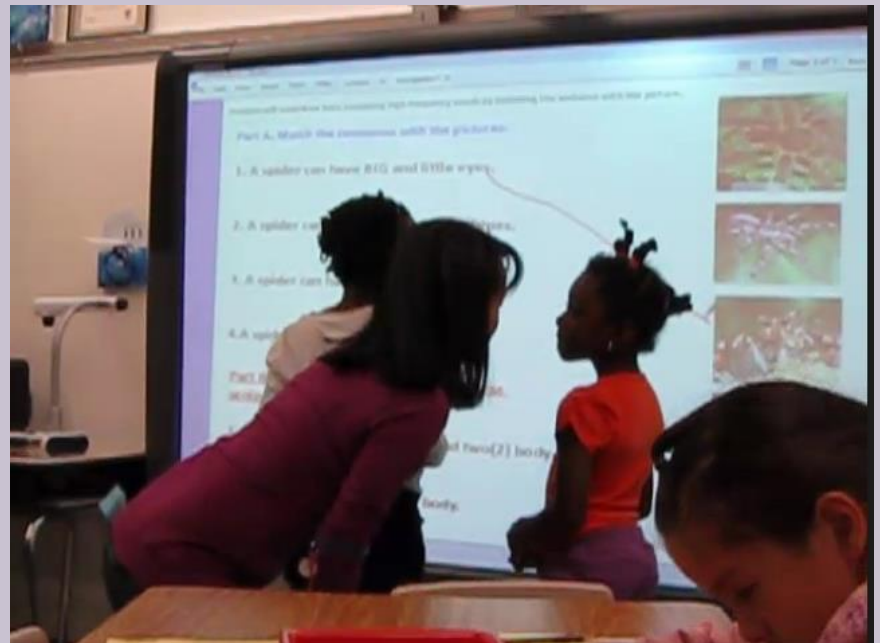
http://www.montgomeryschoolsmd.org/departments/hiat/tech_quick_guides/audacity_teachers.pdf

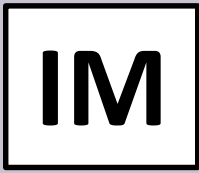




Click and drag to move left selection boundary.

Project rate: 44100 Selection: 0:16.393288 - 0:17.194376 (0:00.801088 min:sec) [Snap-To Off]





ImageMate

Explanation of Image Mate software icons

Record video and time-lapse photography

Open previously saved files

Remote to control the document camera from your computer

Image Mate

TT-02RX

Take picture and save to your hard drive

Tools: Select the time-lapse interval, resolution, file format, etc.

Show live image

Electric Light Magnifying Object



The ELMO document camera uses a digital camera to capture a live image of any object placed underneath the camera.

http://www.montgomeryschoolsmd.org/departments/hiat/tech_quick_guides/ELMO_QG.shtm

Share PowerPoint books

<http://www.slideshare.net/>



Zakaria

THE DAILY NEWS

Amundsen Reaches South Pole

(OSLO, NORWAY, Dec. 14, 1911) — Today a man from Norway reached the South Pole. His name is Roald Amundsen. He and his men used dog sleds. They traveled about 15 miles a day. The weather was very cold. It was far below zero.

Amundsen was racing a man from England. The man's name is Robert Scott. Amundsen's route was shorter than Scott's. But it was also steeper. That made it harder.

Scott has tried to reach the South Pole before. That was in 1902. But he had to turn back. The weather was very bad. His men were hungry. They were also sick.

Now Scott is trying again. He is still on the trail. Will he make it? When will he get there? No one knows.

Amundsen is the first man to reach the South Pole. He knows a lot about the area. He is strong. He can stand hard things. That is why he got there first.



1. **Who** was the first man to reach the South Pole?

The first man to reach the South Pole was Roald Amundsen.

2. **What** did Robert Scott do in 1902?

In 1902 Robert Scott tried to reach the South Pole.

3. **When** did Amundsen reach the South Pole? (the year)

Amundsen reached the South Pole in Dec. 14 1911.

4. **Where** was Amundsen from?

Amundsen was from OSLO, NORWAY.

5. **Why** did Amundsen do so well on his trip?

Amundsen reached South Pole because he knows a lot about the area. Amundsen is strong and he can stand hard things.

Zakaria

Now it is your turn to write. Would you like to make a trip to the South Pole? Why or why not? Use details from the article in your response.

Be sure to include:

A topic (beginning) sentence

At least 2-3 details (examples) from the story

An excellent ending.

I would like to go to the South Pole. My first reason is I can be the first black kid to make history like Amundsen. Another reason that I would like to make the trip is I like cold weather. In the South Pole and can play in the snow all the time. It can be as cold as below zero. The last reason I would like to go is for the adventure. It is something different that I would like to try.



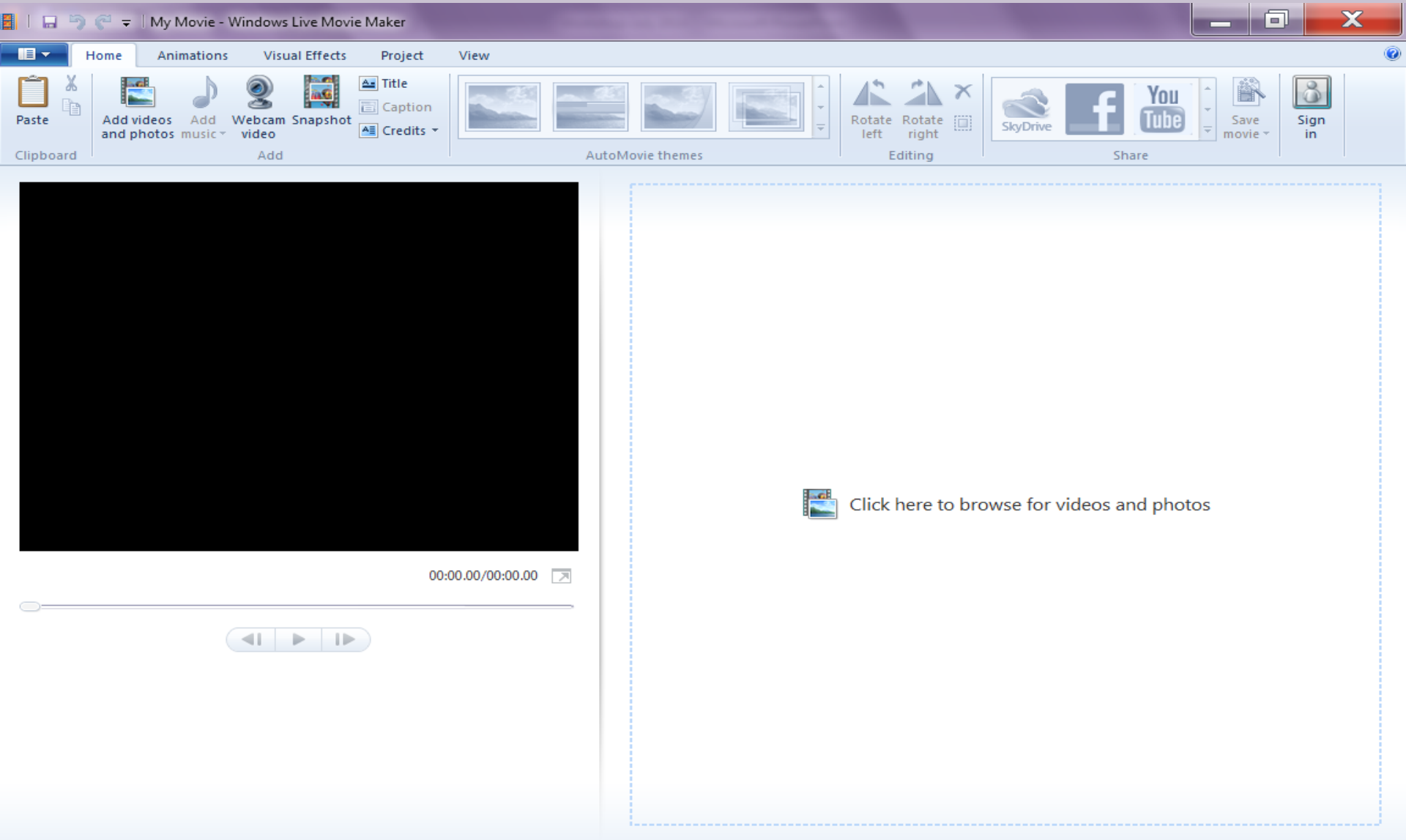
REFLECTION

**How can you
use these
tools?**





http://www.montgomeryschoolsmd.org/departments/hiat/tech_quick_guides/movie_maker.shtm



Hi! My name is Dande.

I go to Cannon Road Elementary School. My ESOL teacher is Mrs. Dan. She taught me a lot of things. For example I use Word Q. Word Q helps you to spell and hear words. I also learned how to use Natural Reader. Natural Reader helps you read. Audacity helps me record my voice. I like this program because it is fun and my dad can hear me. I really like working with Movie Maker. I can make a movie about me! I have learned so much from Mrs. Dan. I taught Mrs. Costa my teacher how to use all this. Mrs. Dan is a fabulous teacher.





WordQ's main purpose is helping individuals who struggle with writing. WordQ uses word prediction to suggest words that the user is typing into documents and emails, helping with spelling.

http://www.montgomeryschoolsmd.org/departments/hiat/tech_quick_guides/word_q_QG.shtm



Free Natural Reader

http://www.montgomeryschoolsmd.org/departments/hiat/tech_quick_guides/naturalreader_QG.shtm

NaturalReader is a clear and simple text-to-speech application that reads aloud any text presented in the program's interface.

File Control Edit Advanced View Window Help Upgrade

New Open Save Cut Copy Paste Undo Settings Purchase

▶ Welcome to NaturalReader software.

◀ ◻ ▶ NaturalReader is a professional text to speech program that converts any written text into spoken words. In other words, it allows you to listen to text instead of reading the screen!

↻ Mp3

It's never been so easy to use a text-to-speech program. Just one click, and your computer speaks any text aloud in a clear, natural sounding voice. All you do is, press Control F9, and your computer reads any selected text.

Conveniently, plug-in bars are provided in IE, MS Words, PowerPoint, and Outlook, so you can listen to online news, Emails, e-books, Documents, and PDF files. NaturalReader also has the ability to convert any written text into an MP3 or WAV audio file, so you can listen later with your iPod.

With the Floating Bar, you can move NaturalReader anywhere without blocking the

Speed 0

Speaker

Microsoft Anna - E

Floating bar

MAIN ONLINE

Used Natural Reader

Shays's Rebellion

Daniel Shays, outraged by the denial of paper money to prevent foreclosure on the lands of hardworking farmers, led a rebellion against the government to prove how serious the farmers of the time were. They had lost all of their land and property because of the postwar depression and Shays was fighting not only for himself but for his friends as well. Shays needed backup and Luke Day and his fleet were supposed to come and aid Shays during the attack, but because of a lack in communication, Shays was defeated and forced to flee.



June, 1783 War's End



November, 1783
Boom & Bust
Post War



September, 1786
Petition and Protest
"Our property is torn from us."

Back to "Revolutionary War Era" Chronology

Daniel Shays was a Revolutionary War soldier. He fought hard for his country. He served in the revolution at Bunker Hill, Ticonderoga, Saratoga and Stony Point where he was promoted to captain. So what led him to rebel against the very government that he had fought and risked his life for? Obviously, Shays felt strongly about an issue and felt as if he was being wronged by the government in some way.

After the war was over, Shays settled in Massachusetts and at first attempted to be just a normal citizen and get back to normal life. He became a respected member of the community. He served in several country positions, including town warden, and was active in the local militia.

Shays' anger began to fume during the postwar depression because the Massachusetts legislature denied the demands of farmers for paper money that

would have prevented foreclosure on their lands. So many farmers began to lose their farms and all that they had. Shays was hit hard by the impact of the depression on not only himself, but seeing the effects that it had on his friends and family of the community. His response? Rebel and force the government to help out the people in the country for whom he had just risked his life. Shays took action immediately. He took charge at Springfield and forced the Supreme Court to stop. With these troops, he led a surprise attack on the government in January 1787. The government was shocked by not only his efforts, but also the support behind his efforts.

Determined not to stop until he had what he wanted, Shays and his group planned an attack on the Springfield storage with Luke Day, who was joining to fight for Shays' cause. However, there was a mix up and Day and his fleet weren't able to attack with Shays on the planned date so Day sent a letter to Shays explaining that they would not be there to support the rebellion. Unfortunately for Shays, he never received the letter from Day. It was intercepted by the government and when Shays' army attacked, they were forced to retreat. They were finally forced to surrender at Sheffield.

Shays fled to Vermont, then to Canada, and then back to Vermont where he was sentenced to death. The government was afraid of what Shays could have accomplished. The fear of disorder was strong, so they felt he deserved a strong punishment. At first he was refused a pardon although others involved received one. He was finally granted a pardon in June 1788.

Daniel Shays is an example of someone who believed so strongly that the government was in the wrong, that he was willing to risk his own life. Who knows what could have happened if the letter from Day had not been intercepted. One thing that can be learned from Shays is his example of an expressive but ineffective way to bring attention to widespread economic and political grievances.

Name _____ Date _____

Write About It: Shays Rebellion

Write a summary about Shays Rebellion. Be sure to include the following:

- * an explanation of what caused the rebellion (details)
- * a description of the people involved(details)
- * the outcome of the rebellion(details)
- * how did it change the government(details)

Checklist

- Now check your writing. Ask yourself:
- * Did I answer all the questions (above)?
 - * Did I support the reasons/main points with details?
 - * Does my writing make sense?
 - * Did I write in complete sentences?
 - * Did I use correct punctuation and spelling?
 - * Did I write my best?

Name _____ Date _____

After reading about Daniel Shays' Rebellion answer these questions.

1. Why was Daniel Shays so upset and with whom?
2. What was Daniel Shays role during the Revolutionary War?
3. What did Daniel Shays do after the Revolutionary War?
4. What could be learned about Shays' Rebellion?

REFLECTION

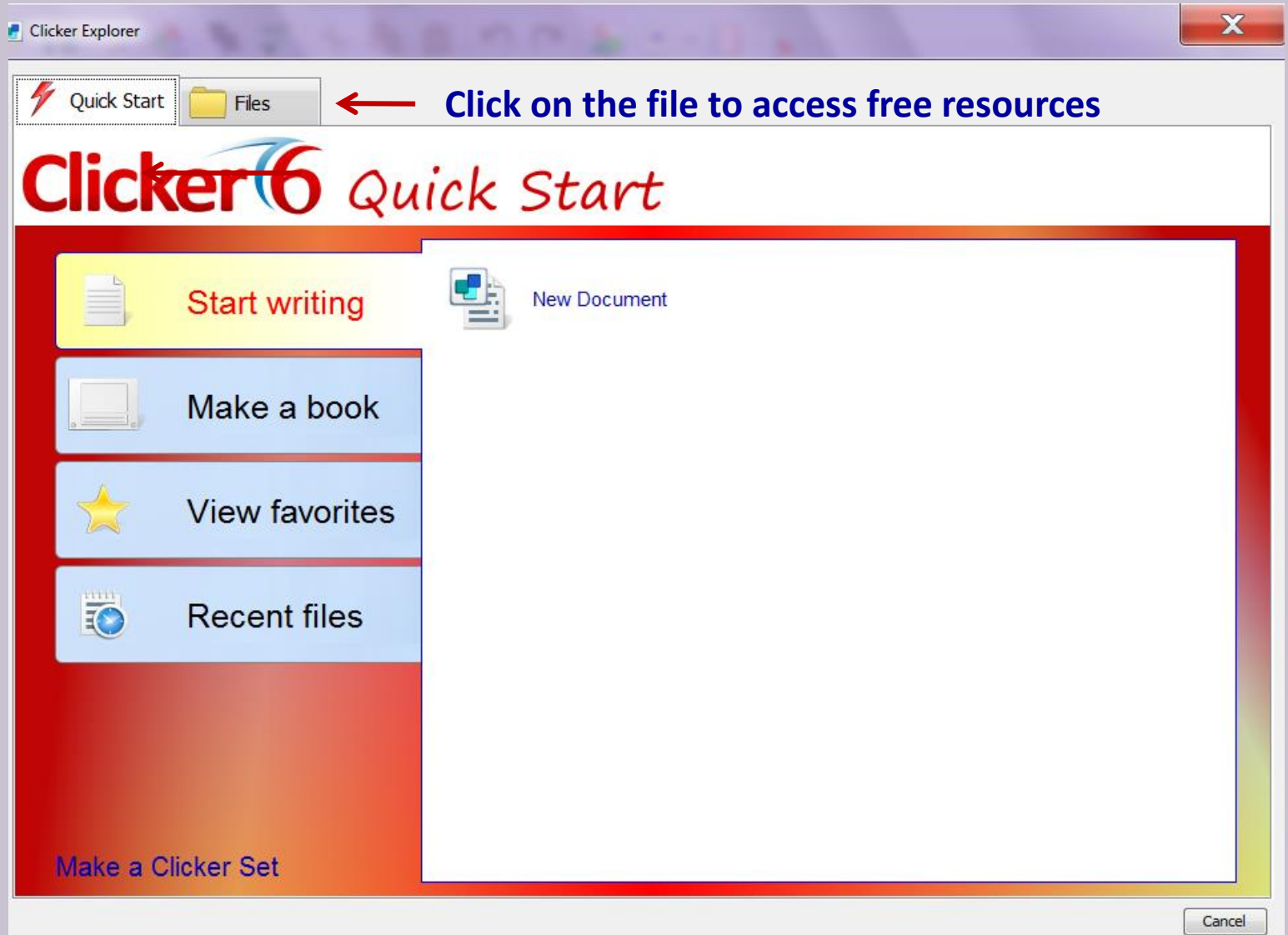
**How can you
use these
tools?**





Clicker 6

Clicker 6 is a customizable word processor that incorporates multi-media, including pictures, movies, voice recordings, word prediction and more. Here is some basic information on this tool:
Generic name: Multi-media, customizable word processor.





Clicker 6

Clicker Explorer



Quick Start



Files



Shared Files

Search this folder



Shared Files



Free Resources



Computer



Desktop



My Documents



Examples



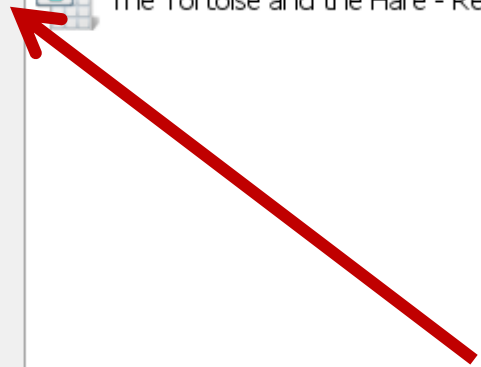
Users



TH Afra



The Tortoise and the Hare - Read



LOVE this button! Free Resources

Show: All supported files (*.clk; *.clkt; *.clkk; *.clkp; *.clks; *.clkd; *.cdoc; *.cadoc; *.docx; *.doc; *.html; *.htm)



Shared Files



Free Resources



Computer



Desktop



My Documents



North America UK ANZ

Crick
software

Age: 3 3 6 9 12 15 18 Adult

Showing 1 to 10 of 1018 resources

Categories

Adult Learners
Arts
Assessment
Assistive Technology
Citizenship
Early Learning
ESL
Foreign Languages
Geography
History
Language Arts
Literature
Math
Science
Secondary Writing
Themes



Circus Performers - Read

This is a Clicker 6 on-screen book about the circus. Each page shows a different circus performer and gives simple information to describe what they are like and what they are doing.

Run Now

More ▾

For ages 5 to 6

Circus Performers - Write a Book
(Click & Edit Version)

In this Clicker 6 activity, students create their own book about the circus. They write sentences about circus performers and add or paint pictures to illustrate the sentences.

Run Now

More ▾

For ages 5 to 6

Circus Performers - Write a Book
(Button Version)

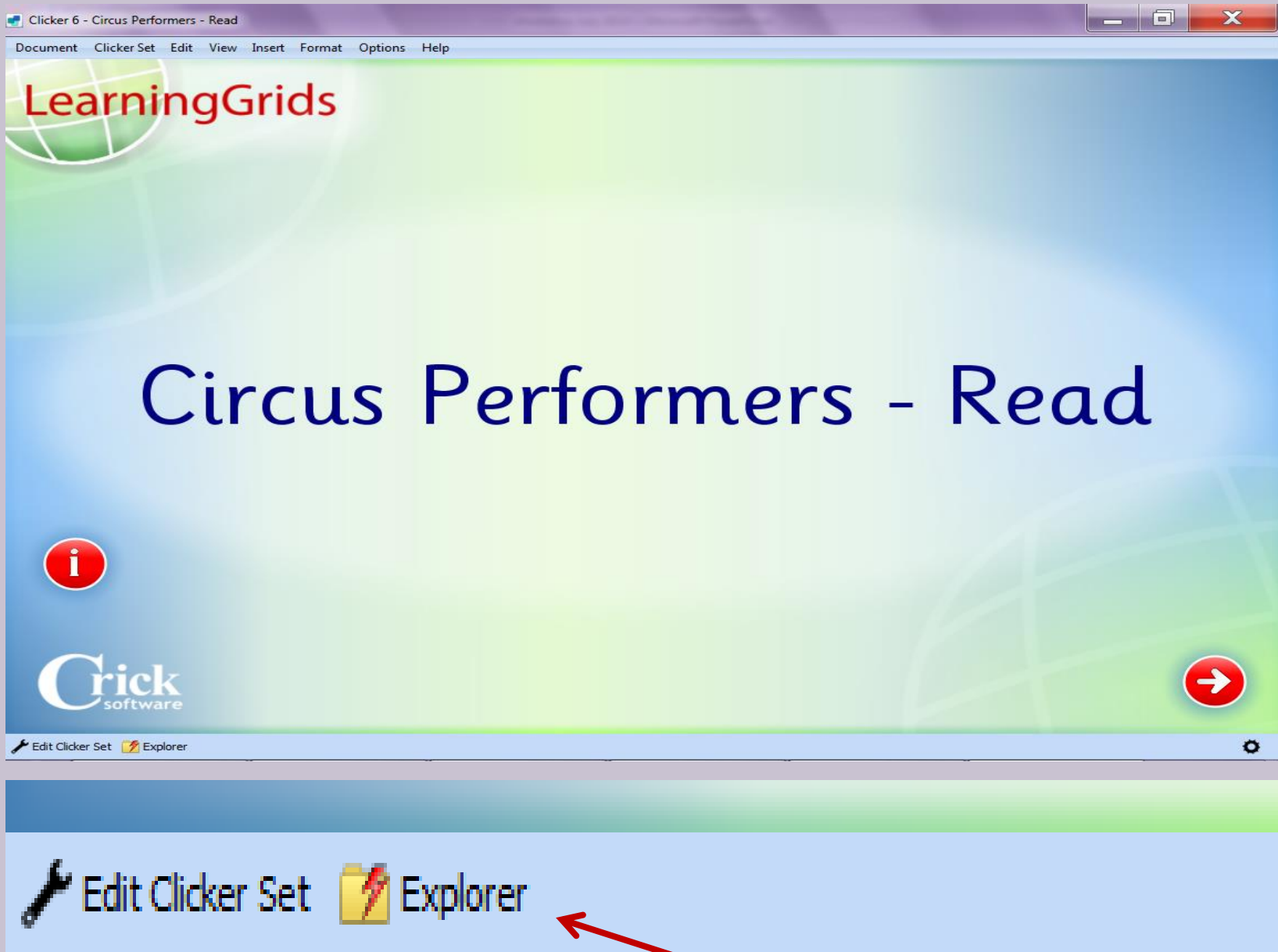
In this Clicker 6 activity, students create their own book about the circus, using buttons to open writing and

Run Now

More ▾

Open

Cancel



Takes you back to the menu



banana



grapes



apple



peach



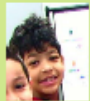
watermelon



Jiyi



Christopher



Braulio



Belsy



Mrs. Dan

Listen 1

Listen 2

Listen 3

Listen 4

Listen 5

Listen 6



My name is Jose. The grade I am in is 5th. I have brown eyes and black hair. My best friend's name is Allan. My favorite color orange.



My favorite meal is spaghetti. I can run and climb. I like to go



swimming and ride my bike.





Clicker 6

http://www.montgomeryschoolsmd.org/departments/hiat/tech_quick_guides/Clkr6_QG.shtm



Microsoft OneNote (formerly called Microsoft Office OneNote) is a computer program for free-form information gathering and multi-user collaboration. It gathers users' notes (handwritten or typed), drawings, screen clippings and audio commentaries

Visual Phonics is a system of 46 hand-shapes with corresponding movements -which when used together are called "cues". These cues represent the 46 phoneme sounds of spoken English. This system was originally developed by a mother for her deaf son, to aid in teaching speech and reading.

<http://youtu.be/Nn5DaRUjgFQ>

Students will state an opinion by using strong adjectives.

You have been asked to recommend a book for kindergarten students.

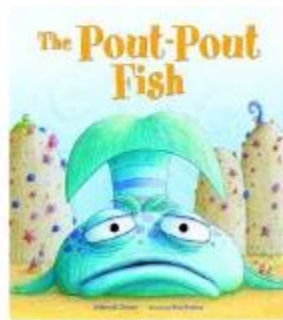
Which book would you recommend? Why? In your response include at least 2 reasons with examples from the book to SUPPORT your response.

Chicka Chicka BOOM BOOM or *Pout Pout Fish*



Here is what you need to do:

1. First listen to the stories by clicking on the image.



2. Take notes using the next page.



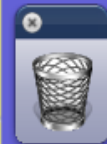
Students will state an opinion by using strong adjectives.

Reason 1:

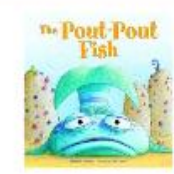
Reason 2:

Example 1 from the story:

Example 2 from the story:



Students will state an opinion by using strong adjectives.



I would recommend

This book is because in the book

Also this book is because in the book

One more thing about the book

Finally I would recommend this book because



REFLECTION



**How can you
use these
tools?**

One Final Thought

Once you learn how to use these tools it's simple and fast and everyone will benefit.

