# USING THE ZING STIKBOT APP (STIKBOT STUDIO) TO CREATE SHORT FILMS ABOUT THE HUMAN IMPACT ON THE ENVIRONMENT - GRADE 7

SOFIA SALEEM (/USERS/SOFIA-SALEEM)

In this TEL, students will utilize the StikBot App (Stikbot Studio), an application easily downloadable on Apple and Android products (e.g. Ipads, Iphones, Tablets, etc.) to produce short films using stop motion animation as a form of storytelling in the Grade 7 Understanding Life Systems Unit to support their own inquiry questions.

**Technology Focus:** Zing Stikbot Studio App (Stikbot Studio) on iOS (Apple) and Android Devices; Google Docs for Conferencing/Anecdotal feedback; Google Docs Rubrics for Assessment

The Stikbot App (Stikbot Studio) is quite versatile as it can also be used to highlight or illustrate concepts covered in the K-12 Science & Technology curriculum linked to other subjects or topics in an integrated STEAM program.

Level: Basic knowledge of how to download this App on a digital device is needed. The App platform is relatively easy to use. Beginner users will find the initial learning process relatively simple.

Audience: Grade 7

NOTE: Students from as young as Kindergarten to High School can use the StikBot App with increasing complexity. Students with difficulties with fine motor skills, students with a variety of learning exceptionalities and ESL students will find this a useful platform to illustrate their understanding of concepts using still images.

Tool Highlights: The specific technology that will be highlighted in this TEL is the user-friendly Zing Stikbot Studio App as a stop motion animation tool.

Big Ideas:

Ecosystems are in a constant state of change. The changes may be caused by nature or by human intervention.

Human activities have the potential to alter the environment. Humans must be aware of these impacts and try to control them.

Ministry Expectations: Understanding Life Systems Interactions in the Environment (Grade 7)

Overall expectations: STSE expectations, specific expectations

1. assess the impacts of human activities and technologies on the environment, and evaluate ways of controlling these impacts

2. investigate interactions within the environment, and identify factors that affect the balance between different components of an ecosystem

Specific:

1.1 assess the impact of selected technologies on the environment

1.2 analyse the costs and benefits of selected strategies for protecting the environment

2.2 design and construct a model ecosystem and use it to investigate interactions between the biotic and abiotic components in an ecosystem

2.3 use scientific inquiry/research skills to investigate occurrences that affect the balance within a local ecosystem

2.4 use appropriate science and technology vocabulary, including sustainability, biotic, ecosystem, community, population, and producer, in oral and written communication

2.5 use a variety of forms to communicate with different audiences and for a variety of purposes

Prior Skill Sets/Knowledge

- Know how to download Apps on Android or Apple devices
- Have used a device/software/app for making movies/animations
- Knowledge of Abiotic/Biotic factors, succession, impact of pollutants and population growth/decline on a population and diverse relationships in an ecosystem

Materials and Equipment

- Checklist of Assignment (https://docs.google.com/document/d/1xCudkDnDgOhz48ee4WztzCXlt432ZoIdevS-8YEg_vU/edit?usp=sharing) (Document #1) including length/duration of the film, characters/setting/plot expectations
- Ipad/Iphone/Android device (e.g. phone or tablet) with Zing Stikbot Studio App installed
- Storyboard Template(s) (https://docs.google.com/document/d/1-smaKpsWcH-aH1urZz8bPSSIm-jhQYpQvLRzF_-gm6Q/edit) (Document #2)
- Plasticine, paper, other objects/materials students would want to included in their film (encourage students to provide their own objects/materials as this will encourage artistic creativity)

- Guiding questions and/or Brainstorm template (https://docs.google.com/document/d/1bXAquPfXEzUTDfBDYC2SQIm4hdBgFdavJwYNAuemDPU/edit?usp=sharing) (Document #3) to prompt storylines

Technical Aspects of the StikBot App

- the Stikbot Studio App, is compatible with iOS and Android devices
- the app is simple to download on a digital device and is easy to use
- the main idea of stop motion is understanding that it consists of individually photographed frames, with the object(s) moved slightly between each picture and superimposed over the camera view
- The app has automatic settings for focus and light exposure

*Below, an outline is provided on how to introduce and use this app for stop motion films.*

Instructional strategies

Lesson #1: Experimenting with the StikBot App (45 minutes)

Grouping: Pairs/3-4 students per group

Materials Needed: At least 1 small object (e.g. eraser, ball, pencil, etc.); background for filming; Digital Device with Stikbot Studio App

Task: In this introduction lesson, students are encouraged to use their imaginations using at least ONE object to create a short 5-10 seconds animation using the Stikbot Studio App

Before Filming:

STEP #1: Open the Stikbot Studio App.

STEP #2: Click on the “Create Movie” icon to take multiple shots of an object for seamless movement in a scene

*If students wish to capture an image for use as a background, the “Capture Photo” icon is available for this task

STEP #3: Set up the filming site (backgrounds)

- Students can create their own makeshift backgrounds, green screen or blue screen backgrounds using 14 x 17 construction paper or bristol boards, alternatively green or blue cloths can be hung up on a wall as as central filming site
- the Green or Blue Screen option can be selected by clicking on the ⚙Settings of the App in “Create Movie” mode

STEP #4: Place Object(s) for filming

Filming the Movie:

STEP #5: Take photos of object(s) one at a time, superimpose each image as you complete the full shot.

STEP #6: Run the movie to view the final product.

Sharing the Movie:

STEP #7: Students can share their movie by uploading it to their Google Drive and then to the Classroom. Alternatively, they can share the movie and the teacher can then add each movie as a link in a Google Slide deck for viewing on their own or with the class.

Note:

In this first introductory task, editing the film is not necessary. A tool for editing can be introduced later on in the final culminating task.

Lesson #2: Sharing Short Films (Samples) and Story Board creation (45 minutes)

Grouping: Pairs/3-4 students per group

Materials Needed: Storyboard template (Document #2); Guiding questions to brainstorm possible topics as a class (Document #3); Digital Device to review samples of short films (added on Google Classroom after they are shared in class)

Task: In this lesson, students will review samples of Stop Motion animation projects viewable through YouTube. Next, they will use these animation films as inspiration to write up their own story board for impacts human beings have on our environment based on independent inquiry questions.

Previously from lesson #1 (Notes):

In lesson #1, students are asked to dive into stop motion animation by experimenting with the app with little to no prior knowledge. This is done intentionally to encourage students to focus on skill sets such as collaboration, communication, organization and time management. Technical skills are limited at this stage. In lesson #2, students are now exposed to more complex short films using stop motion animation. The intention is to spark imagination and creativity as they move towards completing their own film on environmental issues.

[A] Examples of Stop Motion Animation (short videos):

PROFESSIONAL SAMPLES

Fresh Guacamole (Oscar Nominated):

https://www.youtube.com/watch?v=dNJdJIwCF_Y (https://www.youtube.com/watch?v=dNJdJIwCF_Y)

Chicken Run Trailer:

https://www.youtube.com/watch?v=rUSoF2nwPw8

CLAYMATION SAMPLES

Morphing Clay:

https://www.youtube.com/watch?v=6GiZhILIgf0

Sammy the Squid:

https://www.youtube.com/watch?v=UkZGDTIijHs

Pac Man Claymation:

https://www.youtube.com/watch?v=WCGcKuiro_4

STIKBOT SAMPLES

Stop Motion with Stikbots:

https://www.youtube.com/watch?v=i_aR1tGmfwg

Ironman and Stikbot Animation (professional):

https://www.youtube.com/watch?v=ev5OOvPcvec

STOP MOTION WITH INANIMATE OBJECTS SAMPLES

https://www.youtube.com/watch?v=-7fI165dVD0 (with paper)

https://www.youtube.com/watch?v=MEglOulvgSY (with fruit)

https://www.youtube.com/watch?v=3DFzjP6PbnU (with candy)

[B] Storyboarding your Stop Motion Animation (Pre-Production)

STEP #1: Brainstorm ideas on your science-inquiry as it focuses on the following theme: “Humans Impact on the Environment” using Document #3 (Guiding Questions/Brainstorm Template).

STEP #2: Use the Storyboard Template (https://docs.google.com/document/d/1-smaKpsWcH-aH1urZz8bPSSIm-jhQYpQvLRzF_-gm6Q/edit?usp=sharing) (Document #2) to plan out your short film. Focus on the main elements of Narrative if a fictional story (e.g. Plot, character(s), storyline (beginning, middle, end), setting); Focus on details about information if a non-fictional film.

STEP #3: Choose your materials (e.g. clay, popsicle stick characters, paper, stickbots, other inanimate object(s), etc.)

STEP #4: Conference with teacher to showcase your storyboard template. Use feedback to improve on the overall story board prior to initiating the filming phase. Conference form for the storyboard phase of the project is attached as Document #4.

STEP #5: Review Rubrics (Document #4).

Lesson #3: Filming your Stop Motion Animation (3-4 classes) (Production)

STEP #1: Review the overall features of the Stikbot Studio App (including green/blue screen options, “camera view”, automatic focus/lighting, superimposing images to create a seamless product, sound)

*Video Reference(s):*

Stickbot Studio, App Tutorial Video

https://www.youtube.com/watch?v=uF0Qdx-oaoQ (https://www.youtube.com/watch?v=uF0Qdx-oaoQ)

*Other Stop Motion Animation Tutorial Websites*

http://lemonlimeadventures.com/how-to-do-stop-motion-animation-with-kids/

https://wistia.com/library/producing-stop-motion

STEP #2: Set up your Stop Motion Animation work site (review lesson #1 about setting up the background and props for the film)

STEP #3: Start filming. Film should be between 20-45 seconds but can go longer (maximum 2 minutes).

STEP #4: Add sound effects or music to enhance your final product using

STEP #5: Post-Production - Edit your Stop Motion animation (optional) by uploading the movie to the iMovie app (iOS devices) or FilmoraGo (Android devices)

*Video Reference(s):*

How to Edit Video on iPhone & iPad: i Movie Tutorial for iOS

https://www.youtube.com/watch?v=QdbK7KTgqP0 (https://www.youtube.com/watch?v=QdbK7KTgqP0)

How to Edit Video on Android Devices: FilmoraGo

https://www.youtube.com/watch?v=oPGRCGkoemk (https://www.youtube.com/watch?v=oPGRCGkoemk)

STEP #6: Extension - Connecting to the Grade 7 Media Unit, have students create a Movie Poster to advertise or showcase their short stop motion animation movie. A rubric for this task is attached as Document #5 for assessment.

STEP #7: Stop Motion Animation Movie day! Bring some popcorn and snacks. Student's can showcase their short films and/or share with other students on "Movie Premier Day" in the classroom or school. A rubric for the final stop motion animation video is attached as Document #5 (https://docs.google.com/document/d/1UydIFwLB0nhjL1tYnNHHUx9vRDSLAnXDIbXpWZ1c_uA/edit?usp=sharing)for assessment.

Assessment strategy (for, as, of learning, rubrics (strands), peer evaluation sheets, other)

For Learning: Ask the students to brainstorm and identify topics related to this unit of study (review of content).

As Learning: During the filming use Conferencing and Anecdotal Feedback to address questions or issues that students may have as they develop a storyline and film their movie.

Of learning: Use the Stop Motion Animation Rubric to provide feedback on the final product as it met the needs of the culminating assignment in this unit of study.

Next Steps/Extensions/Accommodations/Other Topics for this Tech Tool:

The Zing Stikbot Studio App provides for endless ideas and can be used in absolutely any subject area. Some possible extensions might include:

- Creating short movie trailers for fictional stories (stories written by students or scenes from a novel or from well known storybook)
- Creating short scenes of a story or novel based on a theme or highlighting an element of a narrative
- Creating infomercials
- Creating lessons for other students to learn from

Some Accommodations to consider:

- ESL students can use this app to create films with more visuals and less words depending on their level of language acquisition
- HSP/Spec. Ed. students can use tripods for cell phones and stands for tablets to stabilize the filming equipment, keep backgrounds simple and clutter free; provide students with a list of topics to choose from
- For students looking for a challenge, consider increasing requirements such as length of film, complexity of storyline, characters etc.

Other possible extensions:

- Showcase films in school celebrations, by inviting members of the community or by inviting other students (of higher or lower grades) to view the films.
- Classmates can create “mock” reviews of the films and share them on a shared classroom space, to understand the role of film critics
- Analyse films focusing on how effectively the topic was conveyed.
- Analyse elements of a narrative.
- Analyse the role of films in the media.
- Research the history of stop motion animation and its roles in early films and in films today.

## ADDITIONAL RESOURCES:

- Classroom examples (optional) of Stop Motion Animation videos made for a Language Arts program is attached as Document #6.

## RESOURCES

- Document #4 - Google Conference Form (https://docs.google.com/forms/d/e/1FAIpQLSfuDXI0fyvyZ9u4j-TvsrPzNOgs5MJOMlijZmmSr2WVBSPPqg/viewform)
- Document #6 - Google Slides (Student Exemplars Grade 7) (https://docs.google.com/presentation/d/1vPZdImxPdv7-MP615lMRsQ_gOdrGTQmZMwWB9yR9Y8o/edit)
- Document #1 - Stop Motion Checklist (https://connex.stao.ca/sites/default/files/document_1_-_stop_motion_animation_checklist.docx)
- Document #2 - Storyboard Templates (https://connex.stao.ca/sites/default/files/document_2_-_storyboard_templates_stop_motion_animation.docx)
- Document #3 - Guiding Questions (https://connex.stao.ca/sites/default/files/document_3_-_guiding_questions2fbrainstorm_template.docx)
- Document #5 - Rubric (https://connex.stao.ca/sites/default/files/document_5_-_stop_motion_and_movie_poster_rubrics.docx)

## ELEMENT

- Technology Enabled Learning (/expert-elements/technology-enabled-learning)

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